SAMSUNG

Capture
memories.
Everyday.

Digimax L60 User Manual
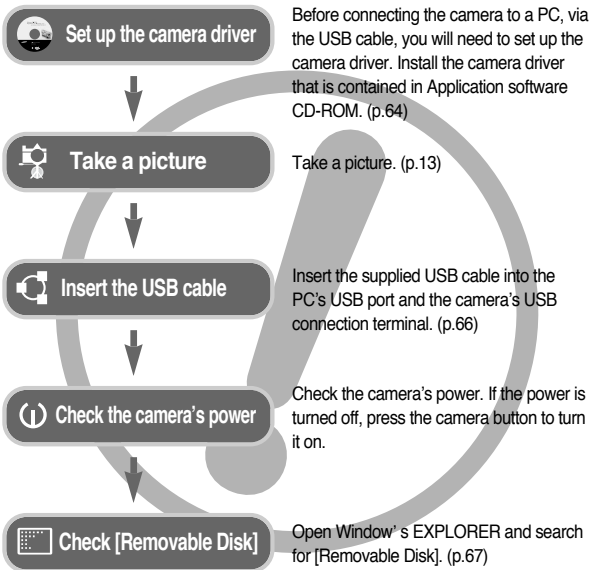
Thank you for buying a Samsung Camera.
This manual will guide you through using the camera, including
capturing images, downloading images and using the application software.
Please read this manual carefully before using your new camera.

ENGLISH

Instructions

■ Use this camera in the following order

Set up the camera driver

Before connecting the camera to a PC, via the USB cable, you will need to set up the camera driver. Install the camera driver that is contained in Application software CD-ROM. (p.64)

Take a picture

Take a picture. (p.13)

Insert the USB cable

Insert the supplied USB cable into the PC's USB port and the camera's USB connection terminal. (p.66)

Check the camera's power

Check the camera's power. If the power is turned off, press the camera button to turn it on.

Check [Removable Disk]

Open Window's EXPLORER and search for [Removable Disk]. (p.67)

● If you use a card reader to copy the images on the memory card to your PC, the images could be damaged. When transferring the images taken with the camera to your PC, be sure to use the supplied USB cable to connect the camera to your PC. Please note that the manufacturer holds no responsibility for loss or damage of images on the memory card due to the use of a card reader.

Getting to know your camera

Thank you for buying a Samsung Digital Camera.

● Prior to using this camera, please read the user manual thoroughly.
● If you require After Sales service, please bring the camera and the cause of the camera malfunction (such as battery, Memory card etc.) to the A/S centre.
● Please check that the camera is operating properly prior to when you intend to use it (e.g. for a trip or an important event) to avoid disappointment. Samsung camera takes no responsibility for any loss or damages that may result from camera malfunction.
● Keep the manual in a safe place.

✳ Microsoft, Windows and Windows logo are registered trademarks of Microsoft Corporation incorporated in the United States and/or other countries.
✳ All brand and product names appearing in this manual are registered trademarks of their respective companies.

Danger

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

- Do not attempt to modify this camera in any way. This may result in fire, injury, electric shock or severe damage to you or your camera. Internal inspection, maintenance and repairs should be carried out by your dealer or Samsung Camera Service centre.
- Please do not use this product in close proximity to flammable or explosive gases, as this could increase the risk of explosion.
- Should any form of liquid or a foreign object enter the camera, do not use it. Switch off the camera, and then disconnect the power source. You must contact your dealer or Samsung Camera Service centre. Do not continue to use the camera as this may cause a fire or electric shock.
- Do not insert or drop metallic or inflammable foreign objects into the camera through access points e.g. the memory card slot and battery chamber. This may cause a fire or electric shock.
- Do not operate this camera with wet hands. This could pose a risk of electric shock.

Warning

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

- Do not use the flash in close proximity to people or animals. Positioning the flash too close to your subject's eyes may cause eyesight damage.
- For safety reasons keep this product and accessories out of reach of children or animals to prevent accidents e.g.:
  • Swallowing battery or small camera accessories. If an accident should occur, please consult a doctor immediately.
  • There is the possibility of injury from the camera's moving parts.
- Battery and camera may become hot during prolonged use and it may result in camera malfunction. Should this be the case, allow the camera to sit idle for a few minutes to allow it time to cool.
- Do not leave this camera in places subject to extremely high temperatures, such as a sealed vehicle, direct sunlight or other places of extreme variances in temperature. Exposure to extreme temperatures may adversely affect the camera's internal components and could cause a fire.
- When in use, do not cover the camera or Charger. This may cause heat to build up and distort the camera body or cause a fire. Always use the camera and its accessories in a well-ventilated area.

《2》

Caution

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in a minor or moderate injury.

- Leaking, overheating, or burst battery could result in fire or injury.
  • Use battery with the correct specification for the camera.
  • Do not short circuit, heat or dispose of battery in fire.
  • Do not insert the battery with the polarities reversed.
- Remove the battery when not planning to use the camera for a long period of time. Battery may leak corrosive electrolyte and permanently damage the camera's components.
- Do not fire the flash while it is in contact with hands or objects. Do not touch the flash after using it continuously. It may cause burns.
- Take care not to touch the lens or lens cover to avoid taking an unclear image and possibly causing camera malfunction.
- Avoid obstructing the lens or the flash when you capture an image.
- Credit cards may be demagnetized if left near case. Avoid leaving magnetic strip cards near the case.

Contents

《3》

System chart

Please check that you have the correct contents before using this product. The contents can vary depending on the sales region. To buy the optional equipment, contact your nearest Samsung dealer or Samsung service centre.

< Included items >

Camera case

User manual, Product warranty

Camera strap

Software CD (see p.63)

Computer (see p.66)

PictBridge compatible printer (see p.49)

DPOF compatible printer (see p.49)

SD memory card / MMC (see p.9)

USB cable

AV cable

Rechargeable battery (SLB-0837)

AC cord + Charger (SBC-L5)

External monitor (see p.56)
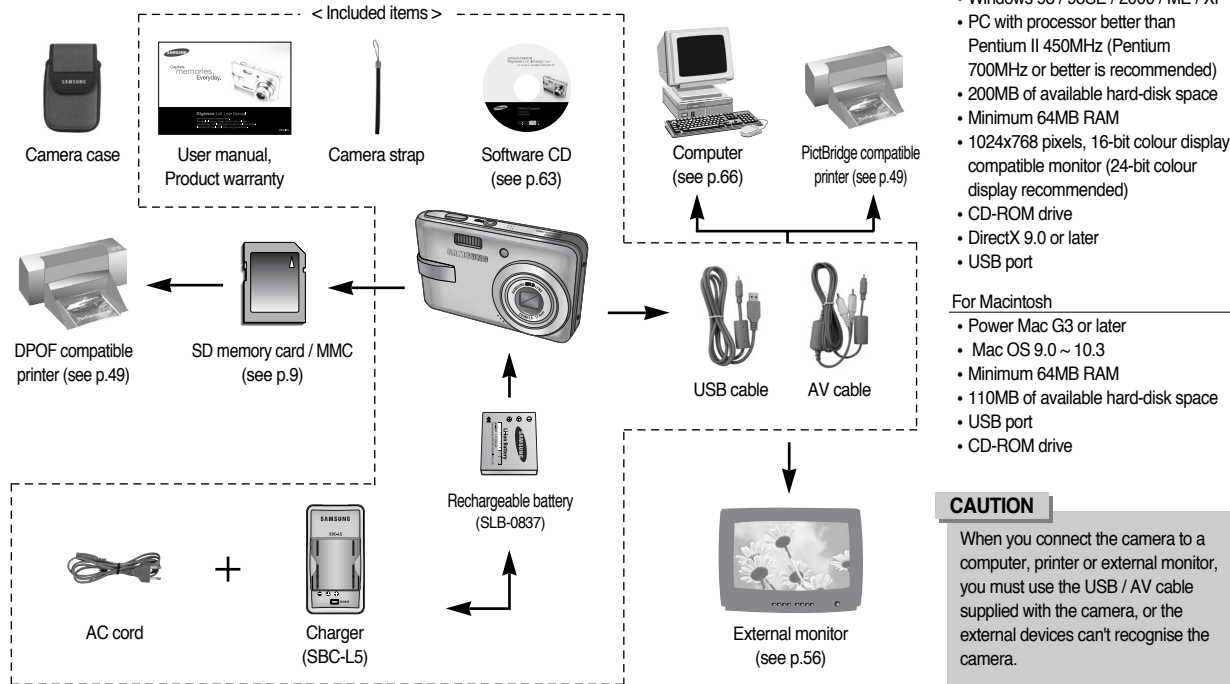
System Requirements

For Windows

- Windows 98 / 98SE / 2000 / ME / XP
- PC with processor better than Pentium II 450MHz (Pentium 700MHz or better is recommended)
- 200MB of available hard-disk space
- Minimum 64MB RAM
- 1024x768 pixels, 16-bit colour display compatible monitor (24-bit colour display recommended)
- CD-ROM drive
- DirectX 9.0 or later
- USB port

For Macintosh

- Power Mac G3 or later
- Mac OS 9.0 ~ 10.3
- Minimum 64MB RAM
- 110MB of available hard-disk space
- USB port
- CD-ROM drive

CAUTION

When you connect the camera to a computer, printer or external monitor, you must use the USB / AV cable supplied with the camera, or the external devices can't recognise the camera.
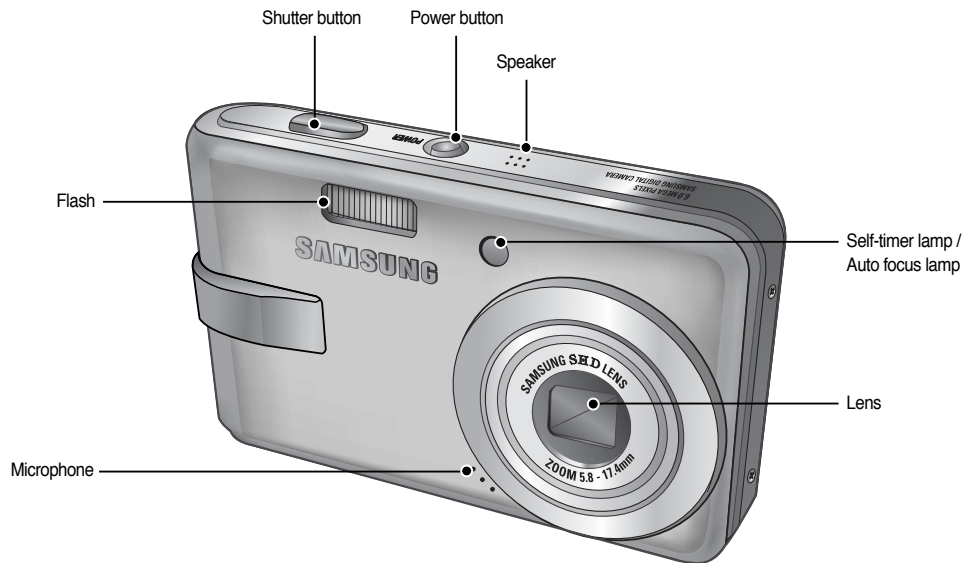
《4》

Shutter button

Power button

Speaker

Flash

Self-timer lamp /
Auto focus lamp

SAMSUNG

SAMSUNG SHD LENS

ZOOM 5.8 - 17.4mm

Lens

Microphone

Camera status lamp

Zoom W button (Thumbnail)

Zoom T button (Digital zoom)

M (Mode) button

LCD monitor

E (Effects) button

Strap eyelet

+ / - button, Delete button

5 function button

SAMSUNG

Tripod socket

Play mode button

Identification of features

Memory card slot   Battery holder

Battery chamber cover   Battery chamber
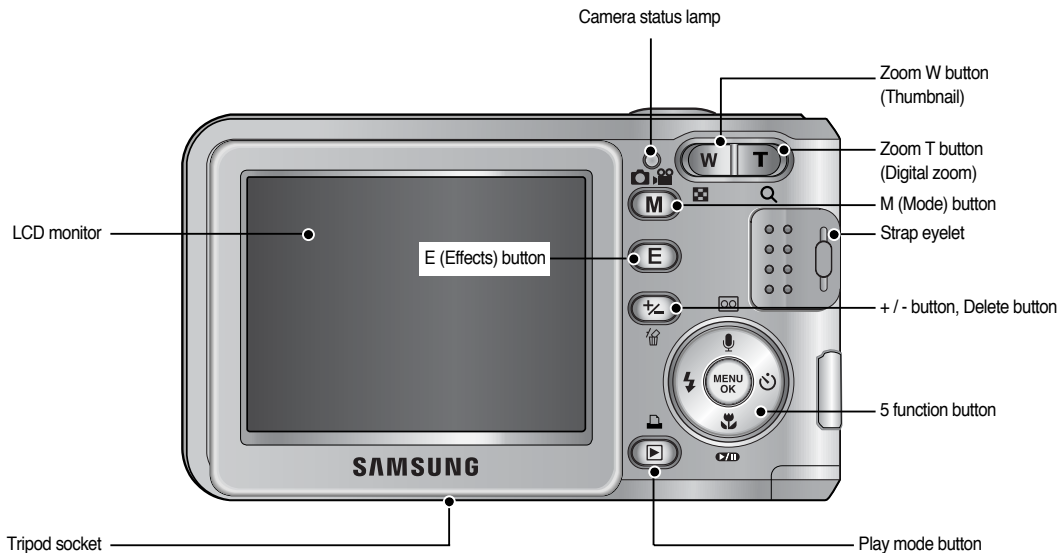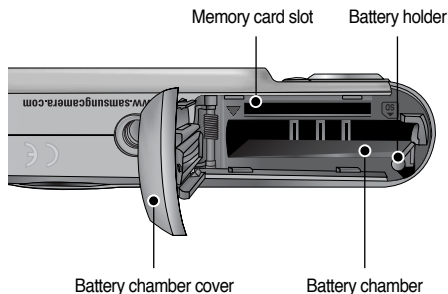
Voice memo / Voice Recording / Up button

Menu / OK button

Flash / Left button

Self-timer / Right button

Macro / Down button
Play & Pause button
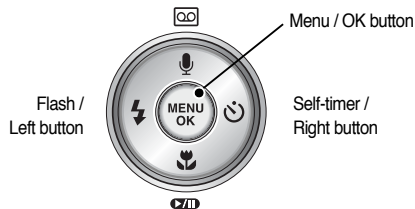
■ Self-timer lamp

Icon	Status	Description
$\circlearrowright$	Blinking	- For the first 7 seconds, the lamp blinks at 1 second intervals. - For the final 3 seconds, the lamp blinks quickly at 0.25-second intervals.
$\circlearrowright^{2S}$	Blinking	For the 2 seconds, the lamp blinks quickly at 0.25-second intervals.
$\circlearrowright^{\circ}$	Blinking	A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.

■ Camera Status Lamp

Status	Description
Power on	The lamp turns on and off when the camera is ready to take a picture
After taking a picture	The lamp blinks while saving the image data and turns off when the camera is ready to take a picture
While movie recording	The lamp blinks at a 0.25-second interval
While voice recording	The lamp blinks at a 0.25-second interval
When the USB cable is inserted to a PC	The lamp lights up (LCD monitor turns off after initializing the device)
Transmitting Data with a PC	The lamp blinks (LCD monitor turns off)
When the USB cable is inserted to a printer	The lamp is off
When the printer is printing	The lamp blinks

Identification of features

■ Mode icon : Refer to page 12 for more information about the camera mode setting.

MODE	MOVIE CLIP	VOICE RECORDING	AUTO		PROGRAM	PLAY
ICON	🎬	🎙️	📷		📷	▶️
MODE	SCENE					
	NIGHT	PORTRAIT	CHILDREN	LANDSCAPE	TEXT	CLOSE UP
ICON	🌙	👤	👶	🏔️	🅣	🌷
MODE	SUNSET	DAWN	BACKLIGHT	FIREWORKS	BEACH&SNOW	-
ICON	🌅	🌄	🖼️	🎆	🏖️	-

Connecting to a Power Source

■ You should use the rechargeable battery (SLB-0837) supplied with the camera.

■ SLB-0837 rechargeable battery Specification

Model	SLB-0837
Type	Lithium Ion
Capacity	860mAh
Voltage	3.7V
Charging time	Approx. 170 MIN (Using the SBC-L5)

■ Number of images and battery life

Still image		Movie
Battery life	Number of images	Recording time
Approx. 95 MIN	Approx. 190	Approx. 84 MIN
Based on the following shooting conditions	Using the fully charged battery, Auto mode 6M image size, Fine image quality Shot to shot interval : 30Sec. Changing the zoom position between the Wide and the Tele ends every 1 shot. Using the flash every two times	Based on the following shooting conditions / Using the fully charged battery 640X480 image size 30fps frame rate

※ These figures are measured under Samsung's standard conditions and Shooting conditions and may vary depending on the way of user's usage.

INFORMATION

Important information about battery usage
● When the camera is not in use, turn off the camera power.
● Please remove the battery if the camera will not be used for long periods. The battery can lose power over time and may leak if kept inside the camera.
● Low temperatures (below 0°C) can affect the performance of the battery and you may experience reduced battery life.
● Battery will usually recover at normal temperatures.
● During extended use of the camera, the camera body may become warm. This is perfectly normal.

Connecting to a Power Source

■ Insert the battery as shown
  - If the camera does not turn on after you have inserted battery, please check whether the battery is inserted with the correct polarity (+ / -).
  - When the battery chamber cover is opened, do not press the battery chamber cover by force. This may cause damage to the battery chamber cover.
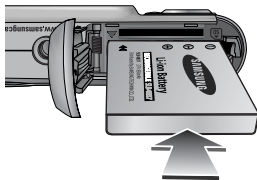
■ There are 4 indicators for battery condition that are displayed on the LCD monitor.

Battery indicator	〔▥▥▥〕	〔▥▥ 〕	〔▥ 〕	〔 〕
Battery status	The battery is fully charged	Low battery capacity (Prepare to recharge or use spare battery)	Low battery capacity (Prepare to recharge or use spare battery)	Low battery capacity (Prepare to recharge or use spare battery)

Inserting the memory card

■ Insert the memory card as shown.
  - Turn off the camera's power before inserting the memory card.
  - Have the front of the memory card facing toward the front of the camera (lens) and the card pins toward the back of the camera (LCD monitor).
  - Do not insert the memory card in the wrong way round. Doing so may damage the memory card slot.

Instructions on how to use the memory card

● Be sure to format the memory card (see p.54) if you are using a newly purchased memory for the first time, if it contains data that the camera cannot recognise, or if it contains images captured with a different camera.
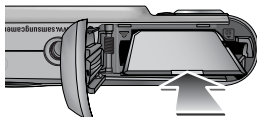● Turn off the camera power whenever the memory card is being inserted or removed.
● Repeated use of the memory card will eventually reduce the memory card's performance. Should this be the case, you will need to purchase a new memory card. Wear and tear on the memory card is not covered by the Samsung warranty.
● The memory card is an electronic precision device.
  Do not bend, drop or subject the memory card to any heavy impact.
● Do not store the memory card in an environment with strong electronic or magnetic fields, e.g. near loud speakers or TV receivers.
● Please do not use or store in an environment where there are extremes in temperature.
● Do not allow the memory card to become dirty or to come into contact with any liquid. Should this happen, clean the memory card with a soft cloth.
● Please keep the memory card in its case when not in use.
● During and after periods of extended use, you may notice that the memory card is warm. This is perfectly normal.
● Do not use a memory card that is used in another digital camera. To use the memory card in this camera, format the memory card using this camera.
● Do not use a memory card formatted by another digital camera or memory card reader.
● If the memory card is subjected to any of the following, the recorded data may become corrupted :
  - When the memory card is used incorrectly.
  - If the power is switched off or the memory card is removed while recording, deleting (formatting) or reading.
● Samsung cannot be held responsible for lost data.
● It is advisable to copy important data onto other media as back-up e.g. floppy disks, hard disks, CD etc.
● If there is insufficient memory available
  : A [Memory Full!] message will appear and the camera will not operate. To optimise the amount of memory in the camera, replace the memory card or delete unnecessary images stored on the memory card.

Instructions on how to use the memory card

INFORMATION

● Don't remove the memory card when the camera status lamp is blinking as this may cause damage to data in the memory card.

■ The camera can use SD Memory Cards and MMC (Multi Media Cards). Please consult the enclosed manual for using the MMC Cards.

Card pins
Write protect switch
Label

[SD (Secure Digital) memory card]
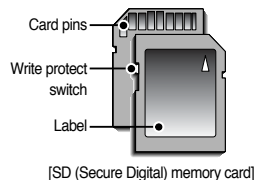
The SD memory card has a write protect switch that prevents image files from being deleted or formatted. By sliding the switch to the bottom of the SD memory card, the data will be protected. By sliding the switch to the top of the SD memory card, the data protection will be cancelled.
Slide the switch to the top of the SD memory card before taking a picture.

■ When using the 23MB internal memory, the specified shooting capacity will be as follows. These figures are approximate as image capacities can be affected by variables such as subject matter and memory card type.

Recorded image size		Super Fine	Fine	Normal	30FPS	15FPS
Still image	6M	7	12	21	-	-
	5M	8	15	24	-	-
	4M	11	19	32	-	-
	3M	14	24	39	-	-
	2M	23	36	50	-	-
	1M	52	72	85	-	-
	VGA	111	133	138	-	-
*Movie clip	640	-	-	-	About 1' 3"	About 2' 2"
	320	-	-	-	About 3' 51"	About 6' 52"

※ The recording times can be changed by the zoom operation.
 The zoom button doesn't use during the movie recording.

LCD monitor indicator

■ The LCD monitor displays information about the shooting functions and selections.

[Image & Full Status]
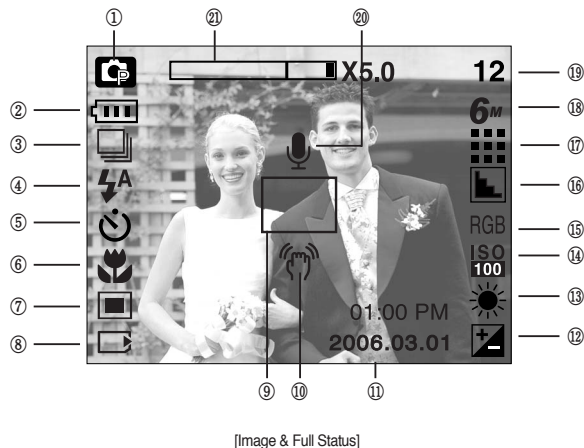
No.	Description	Icons	Page
1	Recording mode	(icons)	p.13~16
2	Battery	(icons)	p.9
3	Continuous shot	□ □ AEB	p.35

| No.	Description	Icons	Page
4	Flash	🔆 ◉ ⚡ ⚡s ⊘	p.20~22
5	Self-timer	⏱ ⏱²ˢ ⏱	p.22
6	Macro	♣ ♣	p.19~20
7	Metering	▣ ⊡	p.35
8	Card inserted indicator	□ⁱ INTᴰ	-
9	Auto focus frame	☐	-
10	Camera shake warning	(icon)	p.16
11	Date / Time	2006.03.01 01:00 PM	p.55
12	Exposure compensation	⊞	p.31
13	White Balance	AWB ☼ ☁ ⛆ ⛆ ☀ ⚖	p.30
14	ISO	ISO ISO ISO ISO ISO	p.29
15	RGB	RGB	p.29
16	Sharpness	◣ ◪ ◩	p.35
17	Image quality	▦ ▦ ▦ 30 15	p.34
18	Image size	6ᴹ 5ᴹ 4ᴹ 3ᴹ 2ᴹ 1ᴹ 640 320 VGA	p.34
19	Number of available shots remaining	12	p.10
	Remaining time (Movie clip / Voice recording)	00:01:30/ 01:00:00	p.10
20	Voice memo	🎤	p.19
21	Optical/ Digital Zoom bar/ Digital Zoom rate	▭▭▭▯X5.0	p.17~18

《11》

Changing the recording mode

■ You can select the desired working mode by the M (mode) button located on the back of the camera and [MODE], [MODE SET] menu. Auto, Program, movie clip, scene (night, portrait, children, landscape, text recognition, close-up, sunset, dawn, backlight, fireworks, beach & snow) camera modes are available.

● Selecting the [MODE] menu
  1. Insert the battery (p.9).
  2. Insert the memory card (p.9). As this camera has a 23MB internal memory, it is not essential to insert the memory card. If the memory card is not inserted, an image will be stored in the internal memory. If the memory card is inserted, an image will be stored on the memory card.
  3. Close the battery chamber cover.
  4. Press the power button to turn on the camera.
  5. Press the menu button and a menu will display.
  6. Use the Left / Right button to select the [MODE] menu.
 7. Select [STILL & MOVIE] or [FULL] sub menu by pressing the UP / DOWN button.
     - [STILL & MOVIE] : A still image mode that was selected on the [MODE SET] menu and movie clip mode can be selected.
       Refer to page 51 for more information about using the [MODE SET] menu.
     - [FULL] : Auto, Program, Movie clip and scene modes can be selected.
  8. Press the MENU button and the menu will disappear.

● Changing the recording mode : If the [STILL & MOVIE] menu was selected Steps from 1-4 are the same as those for selecting the [MODE] menu.
  5. The recording mode used just before will display.
  6. Press the M (Mode) button located on the back of the camera and the recording mode will change to the movie clip mode.
  7. Press the M (Mode) button again and a still image mode selected on the [MODE SET] menu will be selected.

[Pressing the M (Mode) button]

[AUTO mode]   [MOVIE CLIP mode]
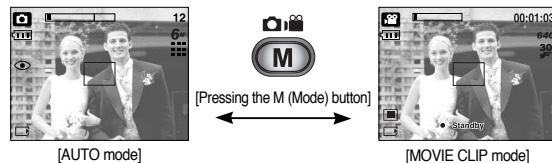
Changing the recording mode

● Changing the recording mode : If the [FULL] menu was selected
  Steps from 1-4 are the same as those for selecting the [MODE] menu.
  5. The recording mode used just before will display.
  6. Press the M (Mode) button located on the back of the camera and the mode selection menu will display.
  7. To select the Auto, Program, Movie clip or Scene modes, press the Left / Right button.
  To move between the Auto, Manual, Movie clip menu line and Scene menu line, press the Up / Down button.

[Mode selection menu]

[Pressing the Left button]

[Selecting the Movie clip mode]

[Pressing the Up button]

[Selecting the Scene mode]
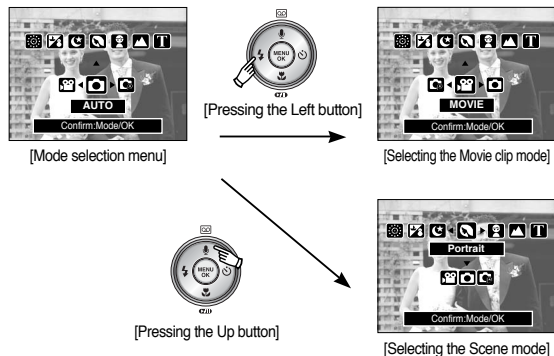
8. Press the M (Mode) button and the mode selection menu will disappear.

Starting the recording mode

■ How to use the Auto mode
  Use this for shooting basic still images.
  1. Select the [FULL] sub menu on the [MODE] menu (p.12).
  2. Select the Auto mode by pressing the M (Mode) button (p.13).
  3. Point the camera towards the subject and compose the image by using the LCD monitor.
  4. Press the shutter button to capture an image.

[AUTO mode]

INFORMATION

● If the auto focus frame turns to red when you press the shutter button down half way, it means that the camera cannot focus on the subject. Should this be the case, the camera is less likely to capture an image clearly.
● Avoid obstructing the lens or the flash when you capture an image.

Starting the recording mode
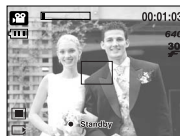
■ How to use the Movie clip mode
A movie clip can be recorded for as long as the available recording time of the memory capacity allows.

[MOVIE CLIP mode]

1. Select the [FULL] sub menu on the [MODE] menu (p.12).
2. Select the Movie clip mode by pressing the M (Mode) button (p.13).
3. Point the camera towards the subject and compose the image by using the LCD monitor.
4. Press the shutter button once and movie clips are recorded for as long as the available recording time allows. Movie clips will still be recorded if the shutter button is released.
   If you wish to stop recording, press the shutter button again.
※ Image size and type are listed below.
   - Image size   : 640X480, 320X240 (user selectable)
   - Movie clip file type : AVI (MPEG-4)

■ Recording the movie clip without sound
You can record the movie clip without sound.
Steps from 1-3 are the same as those for MOVIE CLIP mode.

4. Press the Up button and the (🔇) icon will display on the LCD monitor.
5. Press the shutter button and movie clip is recorded for as long as the available recording time without sound.
6. To stop the recording, press the shutter button again.

■ Pausing while recording a movie clip (Successive Recording)
This camera allows you to temporarily stop during unwanted scenes, while recording a movie clip. Using this function, you can record your favourite scenes into a movie clip without having to create multiple movie clips.

● Using Successive Recording
Steps from 1-2 are the same as those for MOVIE CLIP mode.

[Successive recording of a movie clip]

3. Point the camera towards the subject and compose the image by using the LCD monitor. Press the shutter button and movie clips are recorded for as long as the available recording time. Movie clips will still be recorded if the shutter button is released.
4. Press the Pause button (▶❙❙) to pause recording.
5. Press the Pause button (▶❙❙) again to resume the recording.
6. If you wish to stop recording, press the shutter button again.

Starting the recording mode

■ How to use the Program mode

Selecting the automatic mode will configure the camera with optimal settings and you can manually configure various functions.

1. Select the [FULL] sub menu on the [MODE] menu (p.12).
2. Select the Program mode by pressing the M (Mode) button (p.13).
3. Point the camera towards the subject and compose the image by using the LCD monitor.
4. Press the shutter button to capture an image.

[PROGRAM mode]

■ How to use the Scene modes

Use the menu to easily configure optimal settings for a variety of shooting situations.

1. Select the [FULL] sub menu on the [MODE] menu (p.12).
2. Select the Scene mode by pressing the M (Mode) button (p.13).
3. Point the camera towards the subject and compose the image by using the LCD monitor.
4. Press the shutter button to capture an image.

[SCENE mode]

※ The scene modes are listed below.

[NIGHT] (🌙) : Use this for shooting still images at night or in other dark conditions.
[PORTRAIT] (👤) : To take a picture of a person.
[CHILDREN] (👶) : To take a picture of fast moving objects, for example, children.
[LANDSCAPE] (🏔) : To take pictures of distant scenery.
[TEXT] (📄) : Use this mode to shoot a document.
[CLOSE UP] (🌷) : Close-up shooting for small objects such as plants and insects.
[SUNSET] (🌅) : For taking pictures of sunsets.
[DAWN] (🌄) : Daybreak scenes.
[BACKLIGHT] (🔆) : Portrait without shadows caused by backlight.
[FIREWORKS] (🎆) : Firework scenes.
[BEACH&SNOW] (🏖) : For ocean, lake, beach and snowscape scenes.

Starting the recording mode

■ How to use the VOICE RECORDING mode (🔲)
A voice recording can be recorded for as long as the
memory capacity allows.

1. In any mode with the exception of Movie clip mode,
   select the VOICE RECORDING mode by pressing
   the Voice recording button twice.
2. Press the shutter button to record a voice.
   - Press the shutter button once and voice is
     recorded for as long as the available recording
     time allows. The recording time will be displayed
     on the LCD monitor. Voice will still be recorded if
     the shutter button is released.
   - If you wish to stop recording, press the shutter
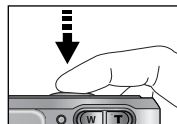   button again.
   - File type : *.wav
   * A distance of 40cm between you and the camera
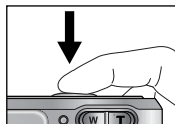   (microphone) is the best distance to record
     sound.

[VOICE RECORDING mode]

Things to Watch Out for When Taking Pictures

■ Pressing the shutter button down half way.
  Lightly press the shutter button to confirm focus and flash battery charge.
  Press the shutter button all way down to take the picture.

[Lightly press the shutter button]   [Press the shutter button]

■ The available memory capacity may vary depending on shooting conditions and
  camera settings.
■ When the Flash Off or Slow synchro mode is selected in a low lighting condition, the
  camera shake warning indicator (🖐) may appear on the LCD monitor. In this case,
  use a tripod, support the camera on a solid surface or change to flash shot mode.
■ Shooting against the light :
  Please do not take pictures to the sunlight direction. Taking a picture against the
  sun may make the picture dark. To take a picture against the sun, please use the
  [Backlight] in the scene shooting mode (see page 15), fill-in flash (see page 21),
  spot metering (see page 35), or exposure compensation (see page 31).
■ Avoid obstructing the lens or the flash when you capture an image.
■ Compose the image by using the LCD monitor.
■ Under certain conditions the auto focus system may not perform as expected.
  - When photographing a subject that has little contrast.
  - If the subject is highly reflective or shiny.
  - If the subject is moving at high speed.
  - When there is strong reflected light, or when the background is very bright.
  - When the subject matter has only horizontal lines or the subject is very narrow
    (such as a stick or flagpole).
  - When the surroundings are dark.

Using the camera buttons to set the camera

■ The recording mode function can be set up by using the camera buttons.

POWER button

● Used for turning the camera's power on / off.
● If there is no operation during the specified time, the camera's power will be turned off automatically to save battery life.
Refer to page 54 for more information about the auto power off function.

Shutter button

● Used for taking an image or recording voice in the RECORDING mode.
● In MOVIE CLIP mode :
Pressing the shutter button down fully starts the process for recording a movie clip. Press the shutter button once and the movie clip is recorded for as long as the available recording time in the memory allows. If you wish to stop recording, press the shutter button again.
● In STILL IMAGE mode
Pressing the shutter button down halfway activates the autofocus and checks the condition of the flash. Pressing the shutter button down fully takes and stores the image. If you select voice memo recording, the recording will start after the camera has finished storing the image data.

ZOOM W / T button

● If the menu is not displayed, this button works as the OPTICAL ZOOM or DIGITAL ZOOM button.

● This camera has a 3X optical zoom and a 5X digital zoom function. Using both will offer a total zoom ratio of 15X.

● TELE Zoom

Optical zoom TELE : Pressing the ZOOM T button. This will zoom into the subject i.e. the subject will appear nearer.

Digital zoom TELE : When the maximum (3X) optical zoom is selected, pressing the ZOOM T button activates the digital zoom software. Releasing ZOOM T button stops the digital zooming at the required setting. Once the maximum digital zoom (5X) is achieved, pressing the ZOOM T button will have no effect.
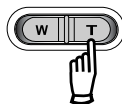
[WIDE zoom]   Pressing the ZOOM T button →   [TELE zoom]   Pressing the ZOOM T button →   [Digital zoom 5.0X]

ZOOM W / T button

● WIDE Zoom
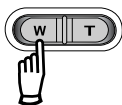
Optical zoom WIDE : Pressing the ZOOM W button. This will zoom out from the subject i.e. the subject will appear further away. Pressing the ZOOM W button continuously will set the camera to its minimum zoom setting i.e. the subject appears at its furthest from the camera.

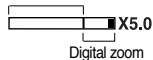[TELE zoom] → Pressing the ZOOM W button → [Optical zoom 2X] → Pressing the ZOOM W button → [WIDE zoom]

Digital zoom WIDE : When the digital zoom is in operation, pressing the ZOOM W button will reduce the digital zooming in steps. Releasing ZOOM W button stops digital zooming. Pressing the ZOOM W button will reduce the digital zoom and then it will continue to reduce the optical zoom until the minimum setting is reached.

Optical zoom

■X5.0

Digital zoom

[Digital zoom 5.0X] → Pressing the ZOOM W button → [TELE zoom] → Pressing the ZOOM W button → [WIDE zoom]

INFORMATION

● Images taken using the digital zoom may take a little longer for the camera to process. Allow time for this to take place.
● The digital zoom cannot be used in movie clip shots.
● You may notice a decrease in image quality when using the digital zoom.
● To view a clearer digital zoom image, press the shutter button halfway at the maximum (3X) optical zoom position and press the zoom T button again.
● The digital zoom can't be activated in the Night scene mode, Children mode,Text mode and two scene modes (Close up, Fireworks).
● Take care not to touch the lens to avoid taking an unclear image and possibly causing camera malfunction. If the image is dim, turn the camera power off and on again to modify the lens position.
● Take care not to press the lens as this may cause a camera malfunction.
● When the camera is turned on, take care not to touch the camera's moving lens parts as this may cause the resulting image to be dim and unclear.

Voice recording (📷) / Voice memo (🎤) / UP button

■ While the menu is showing, press the UP button to move up the sub menu. When the menu is not displayed on the LCD monitor, the UP button operates as the voice recording or voice memo (🎤) button. You can add your voice-over to a stored still image. Refer to page 16 for more information about the voice recording.

● Recording a voice memo
  1. Select a RECORDING mode with the exception of MOVIE CLIP mode. (p.13)
  2. Press the VOICE MEMO (🎤) button. If the voice memo indicator is displayed on the LCD monitor, the setting is completed.

[Preparing for Voice Memo]   [Recording Voice Memo]

  3. Press the shutter button and take a picture. The picture is stored on the memory card.
  4. Voice memo will be recorded for ten seconds from the moment the picture is stored. In the middle of the sound recording, pressing the shutter button will stop the voice memo.

INFORMATION

● A distance of 40cm between you and the camera (microphone) is the best distance to record sound.

Macro (🌷) / Down button

■ While the menu is showing, press the DOWN button to move from the main menu to a sub menu, or to move down the sub menu. When the menu is not showing, you can use the MACRO / DOWN button to take macro pictures. The distance ranges are shown below. Press the Macro button until the desired macro mode indicator displays on the LCD monitor.

[Auto focus - No icon]   [Macro (🌷)]   [Auto macro (🌷)]

■ Types of focus modes and focus ranges (W : Wide, T : Tele)   (Unit : cm)

Mode	Auto (📷)		Program (📷)	
Focus Type	Auto macro (🌷)	Normal	Macro (🌷)	Normal
Focus range	W : 5~Infinity T : 40~Infinity	W : 80~Infinity T : 80~Infinity	W : 5~80 T : 40~80	W : 80~Infinity T : 80~Infinity

INFORMATION

● When the macro mode is selected, it is possible that camera shake will occur. Take care not to shake the camera.
● When you take a picture within 20cm in the Macro mode, select the FLASH OFF mode.

《19》

Macro ( ) / Down button

■ Available focusing method, by recording mode
  (O : Selectable, X : Not selectable, ∞ : Infinity focus range)

Mode						
Normal	O		O		O	
Macro	O		X		O	
Auto macro	X		O		X	

Mode	SCENE										
Normal	O	O	O	∞	X	X	∞	∞	O	∞	O
Macro	X	X	X	X	X	O	X	X	X	X	X
Auto macro	X	X	X	X	O	X	X	X	X	X	X

Focus lock

■ To focus on a subject not positioned in the centre of the picture, use the focus lock function.
● Using the Focus Lock
  1. Ensure the subject is in the centre of the autofocus frame.
  2. Press the SHUTTER button halfway. When the green auto focus frame lights up, it means the camera is focused on the subject. Be careful not to press the SHUTTER button all the way down to avoid taking an unwanted picture.
  3. With the SHUTTER button still pressed down only halfway, move the camera to recompose your picture as desired, and then press the SHUTTER button completely to take the picture. If you release your finger from the SHUTTER button, the focus lock function will be cancelled.

1. The image to be captured.

2. Press the SHUTTER button halfway and focus on the subject.

3. Recompose the picture and fully depress the SHUTTER button.

Flash ( ) / Left button

■ When the menu is displayed on the LCD monitor, pressing the LEFT button makes the cursor shift to the left tab.
■ When the menu is not displayed on the LCD monitor, the LEFT button operates as the FLASH ( ) button.

[Selecting the Auto flash]

● Selecting the flash mode
  1. Select a RECORDING mode with the exception of MOVIE CLIP mode. (p.13)
  2. Press the Flash button until the desired flash mode indicator displays on the LCD monitor.
  3. A flash mode indicator will be displayed on the LCD monitor.
     Use the correct flash to suit the environment.

● Flash range   (Unit : m)

ISO	Normal		Macro		Auto macro	
	WIDE	TELE	WIDE	TELE	WIDE	TELE
AUTO	0.8 ~ 3.0	0.8 ~ 2.0	0.2 ~ 0.8	0.4 ~ 0.8	0.2 ~ 3.0	0.4 ~ 2.0

Flash (⚡) / Left button

INFORMATION

- If you press the shutter button after selecting the Auto, Fill-in, Slow sychro flash, the first flash fires to check the shooting condition (Flash range and Power ratio of flash).
  Do not move until the second flash fires.
- Using the flash frequently will reduce the life of the battery.
- Under normal operating conditions the charging time for the flash is normally less than 5 seconds. If the battery is weak, the charging time will be longer.
- During the continuous shot, AEB and movie clip mode, the flash function will not operate.
- Take photographs within the flash range.
- The image quality is not guaranteed if the subject is too close or highly reflective.
- When taking an image in a poorly lit condition with the flash, there may be a white speck in the captured image. The speck is caused by the reflecting of the flash light from the atmospheric dust. It is not camera malfunction.

● Flash mode indicator

Menu tab	Flash mode	Description
⚡ᴬ	Auto flash	If the subject or background is dark, the camera flash will operate automatically.
👁	Auto & Red eye reduction	If a subject or background is dark, the camera flash will work automatically and will reduce the red-eye effect by using the red-eye reduction function.
⚡	Fill in flash	The flash fires regardless of available light. The intensity of the flash will be controlled, according to the prevailing conditions. The brighter the background or subject is, the less intense the flash will be.
⚡ˢ	Slow synchro	The flash will operate in conjunction with a slow shutter speed in order to obtain the correct exposure. When you take an image in a condition with poor light, the camera shake warning indicator (📶) will display on the LCD monitor. We recommend using a tripod for this function.
⚡̶	Flash off	The flash does not fire. Select this mode when capturing images in a place or situation where flash photography is prohibited. When you capture an image in a poorly lit condition, the camera shake warning indicator (📶) will display on the LCD monitor. We recommend using a tripod for this function.

《21》

Flash (⚡) / Left button

● Available flash mode, by recording mode (O : Selectable X : Not selectable)

	🎬	📷	🅒	🌙	🌃	👤	🏔	🅣	🌷	🍴	🎆	🎇	🎆	🎬
⚡ᴬ	X	X	O	X	X	X	X	X	X	X	X	X	X	O
👁	X	O	O	X	O	O	X	X	X	X	X	X	X	X
⚡	X	X	O	X	X	X	X	X	X	X	X	O	X	X
⚡ˢ	X	X	O	O	X	X	X	X	X	X	X	X	X	X
🚫	O	O	O	O	O	O	O	O	O	O	O	O	X	O

Self-timer (⏱) / Right button

■ When the menu is displayed on the LCD monitor, pressing the Right button makes the cursor shift to the right tab.
■ When the menu is not displayed on the LCD monitor, the RIGHT button operates as the Self-timer (⏱) button. This function is used when the photographer would also like to be in the image.

● Selecting the self-timer
  1. Select a RECORDING mode with the exception of VOICE RECORDING mode. (p.13)
  2. Press the SELF-TIMER button until the desired mode indicator displays on the LCD monitor.
     A 10 second, 2 second or double self-timer icon appears on the LCD monitor. In Movie Clip mode, only the 10-second self-timer will work.
     • 10SEC self-timer (⏱)
       : Pressing the shutter button will allow an interval of 10 seconds before the image is taken.
     • 2SEC self-timer (⏱²ˢ)
       : Pressing the shutter button will allow an interval of 2 seconds before the image is taken.
     • Double self-timer (⏱ᴰ)
       : A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken. When using the flash, the 2-second self-timer may be delayed for longer than 2 seconds depending on the flash charging time.
  3. When you press the SHUTTER button, the picture will be taken after the specified time has elapsed.
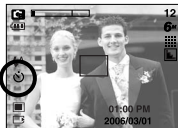
[Selecting the 10 SEC self-timer]

INFORMATION

● If you operate the Power button, Self-timer button, Shutter button or Play mode button during the self-timer operation, the self-timer function is cancelled.
● Use a tripod to prevent the camera from shaking.
● In Movie Clip mode, only the 10SEC self-timer will work.

《22》

MENU / OK button

■ MENU button
  - When you press the MENU button, a menu related to each camera mode will be displayed on the LCD monitor. Pressing it again will return the LCD to the initial display.
  - A menu option can be displayed when the followings are selected : MOVIE CLIP and STILL IMAGE mode. There is no menu available when the VOICE RECORDING mode is selected.

[Menu off]

[Pressing the MENU button]

SIZE

6ᴹ	2816X2112
5ᴹ	2592X1944
4ᴹ	2272X1704
3ᴹ	2048X1536
2ᴹ	1600X1200
1ᴹ	1024X768
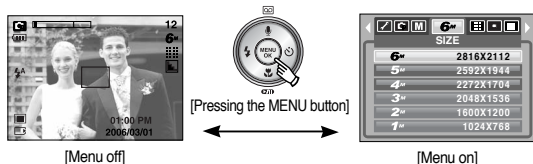
[Menu on]

■ OK button
  - When the menu is displayed on the LCD monitor, this button is used for shifting the cursor to the sub menu or for confirming data.

M (Mode) button

■ You can turn on the camera with this button.

■ You can select the desired recording mode. The selectable recording modes are different from what you selected sub menu in the [MODE] menu.
  - [STILL & MOVIE] : A recording mode selected in the [MODE SET] menu, Movie clip mode
  - [FULL] : Auto, Movie clip, Program, Scene modes

● How to use the mode button : In case of [STILL & MOVIE] and [AUTO] sub menu

[Auto mode]

[Pressing the M button]

[Movie clip mode]

《23》
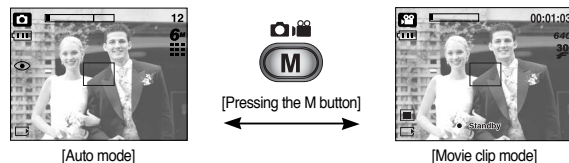
M (Mode) button

● How to use the mode button : In case of [FULL] sub menu and Auto mode

[Auto mode]

[Pressing the Mode button]

[Mode selection menu]

[Pressing the Up button]

[Scene mode]

[Pressing the Right button]

[Program mode]

[Pressing the Left button]

[Movie cliip mode]

[Pressing the Left / Right button]

[Selecting a scene mode]
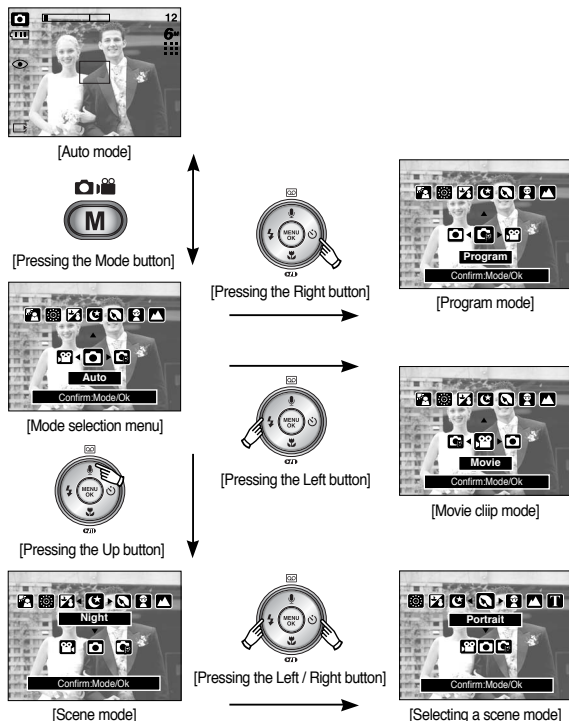
E (Effect) button

■ It is possible to add special effects to your images by using this button
■ Still image mode : You can select the colour, focus, composite and frame menus.
 Movie clip mode : You can select the colour and stabilizer menus.

■ Available Effects, by recording mode (O : Selectable X : Not selectable)

	🎥	📷	📷ₚ	🌃	👤	🏔	🌷
🎨	O	O	O	O	O	O	O
⊞	X	X	O	X	X	X	X
▦	X	X	O	X	X	X	X
🖼	X	X	O	X	X	X	X
💥	O	X	X	X	X	X	X

※ This button will not operate in the Voice recording mode and some scene modes (Night, Text, Sunset, Dawn, Backlight, Fireworks and Beach & Snow) If a special effect is selected, the rest special effect functions set before are cancelled automatically.

■ Even if the camera is turned off, the special effect setting will be preserved. To cancel the special effect, select the [NOR] sub menu in the Colour menu and select the [OFF] sub menu in the rest special effect menu.

Special Effect : Colour

■ By using the camera's digital processor, it is possible to add special effects to your images.
1. Press the E button in the available camera modes.
2. Select the ( ) menu tab by pressing the Left / Right button.
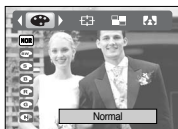
[Still image mode]
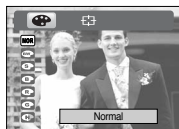
[Movie clip mode]

3. Select a desired sub menu by pressing the Up / Down button and press the OK button.

- **NOR** : No effect is added to the image
- **BW** : Captured images will be stored in black and white.
- **S** : Captured images will be stored in a sepia tone (a gradient of yellowish brown colours).
- **B** : Captured images will be stored in a blue tone.
- **R** : Captured images will be stored in a red tone.
- **G** : Captured images will be stored in a green tone.
- **◐** : Save the image in negative mode.

4. Press the shutter button to capture an image.

Special Effect : Preset focus frames

■ You can make the subject stand out from its surroundings. The subject will be sharp and in focus while making the rest out of focus.
1. Press the E button in the Program mode.
2. Select the ( ) menu tab by pressing the Left / Right button.
3. Select a desired sub menu by pressing the Up / Down button and press the OK button.
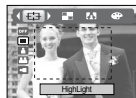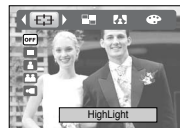
[Range 1]   [Range 2]   [Range 3]   [Range 4]
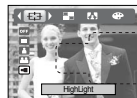
4. The preset focus frame will appear. Press the shutter button to capture an image
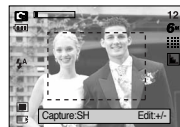
Special Effect : Preset focus frames

● Moving and changing the focus frame
  You can change the focus frame after selecting a Range menu.
  1. Point the camera towards the subject and compose the image by using the LCD monitor.
  2. Press the + / - button.
  3. The colour of focus frame turns white. Press the Up / Down / Left / Right button to move the focus frame position.
  4. To select the focus frame position, press the + / - button again and you can take a picture.
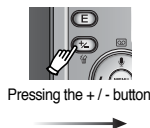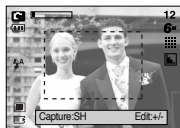
Pressing the + / - button
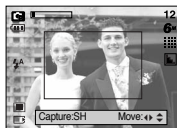
[The frame is activated]

Pressing the
Up / Down / Left /
Right button
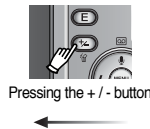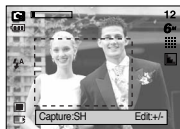
Pressing the + / - button
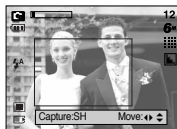
[After changing the frame position]

Special Effect : Composite shooting

■ You can combine 2 ~ 4 different shots in a still image.
  1. Press the E button in the Program mode.
  2. Select the (▤) menu by pressing the Left / Right button.
  3. Select a desired sub menu by pressing the Up / Down button and press the OK button.
     - OFF : cancels the composite shooting
     - ▤ : 2 different shots are combined in a still image.
     - ▥ : 3 different shots are combined in a still image.
     - ▦ : 4 different shots are combined in a still image.
     - ▤ : 2 different panorama shots are combined in a still image.

  4. The number of frames you selected in step 3 is displayed on the LCD monitor. Press the shutter button to start the composite shooting

  ※ Selecting 2 composite shooting

[Ready for taking]　　[First shot]　　[Second shot]　　[The final picture]
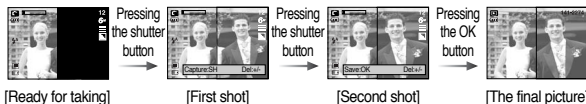
  5. To save the composite shots, press the OK button after taking the last shot.

Special Effect : Composite shooting

● Changing a part of composite shot before taking the last shot
Before taking the last composite shot, you can change a part of composite shot.
1. During the composite shots, press the + / - button.
2. A previous image will be deleted and new frame will display.
If there is an image taken before, press the + / - button again and a previous image will be deleted again.

Pressing the + / - button

[Before taking the 3rd shot]   [Moving backward to the 2nd shot]

3. Press the shutter button to capture a new image.
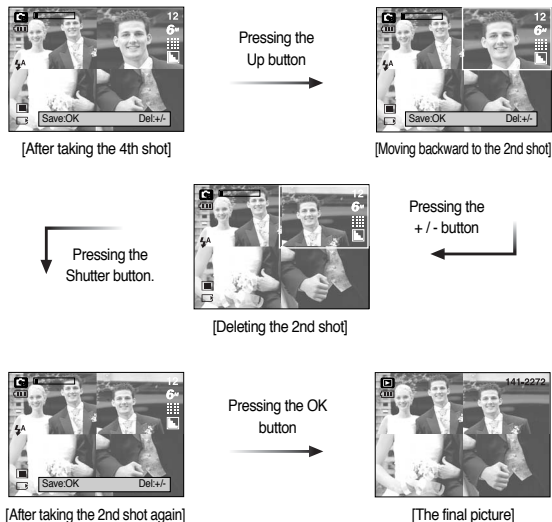
● Changing a part of composite shot after taking the last shot
After taking the last composite shot, you can change a part of composite shot.
1. After taking the last shot , a cursor to select a frame will display. Press the Up / Down / Left / Right button to select the frame.
2. Press the + / - button and an image will be deleted. Composite frame will be activated.
3. Press the Shutter button. You can take another images again by using the Up / Down / Left / Right button and + / - button.
4. To save the image, press the OK button.

Pressing the Up button

[After taking the 4th shot]   [Moving backward to the 2nd shot]

Pressing the Shutter button.

Pressing the + / - button

[Deleting the 2nd shot]

Pressing the OK button

[After taking the 2nd shot again]   [The final picture]

Special Effect : Photo Frame

■ You can add 9 types of frame-like borders to a still image you want to capture.

1. Press the E button in the Program mode.
2. Select the ( ) menu by pressing the Left / Right button.
3. Select a desired sub menu by pressing the Up / Down button and press the OK button.

- OFF : The photo frame will not be added.

Photo Frame

F1 | F2 | F3
F4 | F5 | F6
F7 | F8 | F9
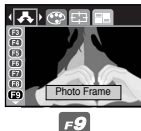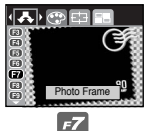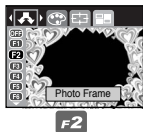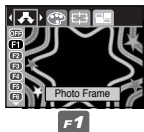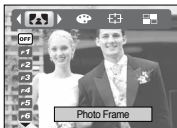
Photo Frame

4. The photo frame will appear.
   Press the shutter button to capture an image
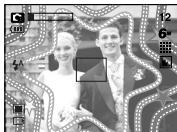
Movie Clip frame stabiliser

■ This function helps stabilise images captured during movie recording.
   You can select this menu only in the MOVIE CLIP mode.
   If the memory card is not inserted, this function will not operate.

● How to use this function
1. Press the E button in the Movie clip mode.
2. Select the STABILISER menu by pressing the Left / Right button.
3. Select a desired sub menu by pressing the Up / Down button and press the OK button.

- OFF : Movie clip frame stabiliser function becomes disabled.
- ON : Prevents camera shake during movie recording.
   The recording frame range will become narrower than when you select the OFF menu. Pre-view frames may not display smoothly on the LCD monitor.

Stabilizer

INFORMATION

● When you select the ON sub menu, the movie clip frame range will be narrow depending on the movie clip size.

+ / - button

■ You can use the + / - button to adjust the values for the RGB, ISO, white balance and exposure compensation.

Main menu	Sub menu	Available camera mode
RGB	R (Red), G (Green), B (Blue)	
ISO	AUTO, 50, 100, 200, 400	
WHITE BALANCE	AUTO, DAYLIGHT, CLOUDY, FLUORESCENT H, FLUORESCENT L, TUNGSTEN, CUSTOM.	
Exposure compensation	-2.0 ~ 0.0 ~ +2.0 (0.5EV steps)	

■ RGB : Allows the user to adjust the R (Red), G (Green), and B (Blue) values of the images to be captured.

● Setting RGB Values
  1. Press the + / - button, and then use the UP and DOWN buttons to select the RGB icon (RGB). The RGB menu bar will appear as shown.
  2. Use the UP / DOWN / LEFT and RIGHT buttons to select the desired RGB value.
    - Up / Down Button : Navigates between R, G, and B icons.
    - Left / Right Button : Changes value of each icon.
  3. When you press the + / - button again, the value you set will be saved and RGB setup mode will end.

※ When special effect (colour) from the icon other than NOR is selected, it will not be able to select the RGB.

■ ISO : You can select the ISO sensitivity when taking pictures. The speed or specific light-sensitivity of a camera is rated by ISO numbers.

● Selecting an ISO Sensitivity
  1. Press the + / - button, and then use the UP and DOWN buttons to select the ISO icon (ISO AUTO). The ISO menu bar will appear as shown.
  2. Use the LEFT and RIGHT buttons to select the desired ISO sensitivity value.
    - AUTO : The camera's sensitivity is automatically changed by variables such as lighting value or subject brightness.
    - 50, 100, 200, 400 : You can increase the shutter speed while the same amount of light is present, by increasing the ISO sensitivity. However, the image may be saturated in high luminance. The higher the ISO value, the higher the camera's sensitivity to light is and therefore the greater its capacity to take pictures in dark conditions. However, the noise level in the image will increase as the ISO value increases, making the image appear coarse.
  3. When you press the + / - button again, the value you set will be saved and ISO setup mode will end.

《29》
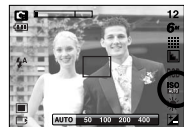
+ / - button

■ White balance : The white balance control allows you to adjust the colours to appear more natural.

● Selecting a White Balance
1. Press the + / - button, and then use the UP and DOWN buttons to select the white balance icon (AWB). The white balance menu bar will appear as shown.
2. Use the LEFT and RIGHT buttons to set the white balance to the desired value. The value you set wil be displayed on the LCD monitor.

AUTO   AWB   : The camera automatically selects the appropriate white balance settings, depending on the prevailing lighting conditions.
DAYLIGHT ☀ : For taking images outside.
CLOUDY ☁ : For taking images under a cloudy and overcast sky.
Fluorescent H ⇌ : For shooting under daylight fluorescent types of three-way fluorescent lighting.
Fluorescent L ⇌ : Shooting under white fluorescent lighting.
TUNGSTEN ☀ : For shooting under tungsten (standard light bulb) lighting.
CUSTOM ▃ : Allows the user to set the white balance according to the shooting condition.

Different lighting conditions may cause a colour cast on your images.
3. Press the + / - button again. The value you set will be saved and White Balance setup mode will end.

● Using the Custom White Balance
White balance settings may vary slightly depending on the shooting environment.
You can select the most appropriate white balance setting for a given shooting environment by setting up the custom white balance.

1. Select the CUSTOM (▃) menu of the White Balance.
2. Place a sheet of white paper in front of the camera so that the LCD monitor shows only white, and then press the SHUTTER button.
3. Your custom white balance value is stored.
  - The custom white balance value will be applied, starting with the next picture you take.
  - The user configured white balance will be remain effective until it is overwritten.

[White paper]

+ / - button

■ Exposure compensation : This camera automatically adjusts the exposure according to the ambient lighting conditions. You can also select the exposure value by using the + / - button.

● Compensating Exposure
1. Press the + / - button, and then use the UP and DOWN buttons to select the exposure compensation icon (🔀). The exposure compensation menu bar will appear as shown.
2. Use the LEFT and RIGHT buttons to set the desired exposure compensation factor.
3. Press the + / - button again. The value you set will be saved and the Exposure Compensation setup mode will close. If you change the exposure value, the exposure indicator (🔀) will be displayed on the bottom of the LCD monitor.

※ A negative exposure compensation value reduces the exposure. Note that a positive exposure compensation value increases the exposure and the LCD monitor will appear white or you may not get good pictures.

Using the LCD monitor to set the camera settings

■ You can use the menu on the LCD monitor to set up recording functions. The items indicated by [ ] are default settings.

Menu tab	Main menu	Sub menu		Camera working mode	Page
📷	MODE SET	Auto	Program		p.33
		Movie	Night		
		Portrait	Children		
		Landscape	Text		
		Close up	Sunset		
		Dawn	Backlight		
		Firework	Beach&Snow		
M	MODE	Still & Movie			p.33
		Full			
6ᴹ	SIZE (Still image)	2816X2112	2592X1944		p.34
		2272X1704	2048X1536		
		1600X1200	1024X768		
		640X480	-		
640	SIZE (Movie clip)	640X480	320X240	📹	p.34

《31》

Using the LCD monitor to set the camera settings

Menu tab	Main menu	Sub menu		Camera working mode	Page
⊞	QUALITY	Super Fine	Fine		p.34
		Normal	-		
🎞	FRAME RATE	30 FPS	15 FPS		p.34
▣	METERING	Multi	Spot		p.35
☐	SHOOTING	Single	Continuous		p.35
		AEB	-		
▨	SHARPNESS	Soft	Normal		p.35
		Vivid	-		
▥	OSD INFORMATION	Full	Basic		p.36
		LCD Save	-		

※ Menus are subject to change without prior notice.

How to use the menu

1. Turn on the camera and press the MENU button. A menu for each camera mode appears. However, there is no menu for Voice Recording mode (🔲).
2. Use the LEFT and RIGHT buttons to navigate through the menus.

Press the LEFT or RIGHT button.

Press the LEFT or RIGHT button.

3. Use the UP and DOWN buttons to select a sub menu.

Press the UP or DOWN button.

Press the UP or DOWN button.

4. Select a sub menu, and then the value you set will be saved.
   Press the MENU button and the menu will disappear.

Mode Set

■ You can select the desired recording mode.

[Auto] : For shooting basic still image
[Program] : You can still manually configure all functions except the aperture value and shutter speed.
[Movie] : For taking a movie clip
[Night] : Use this for shooting still images at night or in other dark conditions.
[Portrait] : To take a picture of a person.
[Children] : To take a picture of fast moving objects, for example, children.
[Landscape] : To take pictures of distant scenery.
[Text] : Use this mode to shoot a document.
[Close up] : Close-up shooting for small objects such as plants and insects.
[Sunset] : For taking pictures of sunsets.
[Dawn] : Daybreak scenes.
[Backlight] : Portrait without shadows caused by backlight.
[Firework] : Firework scenes.
[Beach & Snow] : For ocean, lake, beach and snowscape scenes.

MODE SET

🔲	Auto
🎬	Program
🎥	Movie
☾	Night
	Portrait
Move ↕	Set:OK

INFORMATION

● When [Night], [Landscape], [Text], [Close up], [Sunset], [Dawn] and [Firework] scene mode are selected, it is possible that camera shake will occur.

Mode

■ You can select the desired working mode using the M (Mode) button located on the back of the camera and the [MODE] menu.

[STILL & MOVIE] : A still image mode that was selected on the [MODE SET] menu and movie clip mode can be selected.
[FULL] : Auto, Program, Movie clip and scene modes can be selected.

MODE

STILL & MOVIE
FULL

Size

■ You can select the image size appropriate for your application.

Mode	STILL IMAGE mode							MOVIE CLIP mode	
Icon	6M	5M	4M	3M	2M	1M	VGA	640	320
Size	2816X2112	2592X1944	2272X1704	2048X1536	1600X1200	1024X768	640X480	640X480	320X240
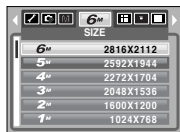
[STILL IMAGE mode]

[MOVIE CLIP mode]

INFORMATION

● High resolution images use more memory than lower resolution shots. Therefore the higher the resolution selected the fewer will be the number of shots available.

Quality / Frame rate

■ You can select the compression ratio appropriate for your application of the captured images. The higher the compression ratio, the lower the picture quality.
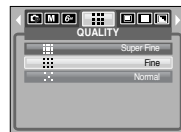
[STILL IMAGE mode]
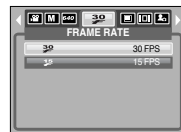
[MOVIE CLIP mode]

INFORMATION

● This file format complies with the DCF (Design rule for Camera File system).

Metering

■ If you cannot obtain suitable exposure conditions, you can change the metering method to take brighter pictures.

- Multi : Exposure will be calculated based on an average of the available light in the image area. However, the calculation will be biased towards the centre of the image area. This is suitable for general use.
- Spot : Only the rectangular area in the centre of the LCD monitor will be metered for light. This is the preferable setting when you want the subject in the centre of the image exposed correctly, regardless of the back lighting.

INFORMATION

● If the subject is not the centre of the focus area, do not use the spot metering as this may result in an exposure error. In this circumstance, it is better to use exposure compensation.

Continuous shot

■ Select the number of pictures in continuous shooting.
- Single : Take one picture only
- Continuous : Images will be taken continuously until the shutter button is released. The shooting capacity depends on the memory available.
- AEB : Take three pictures in a series in different exposures: short exposure (-0.5EV), standard exposure (0.0EV) and over exposure (+0.5EV). Use this mode if it is hard to decide exposure of the object.

※ High resolution and picture quality increases file saving time, which increases stand-by time.
※ If fewer than 3 pictures are available in the memory, the AEB shooting is not available.
※ It is best to use a tripod for the AEB shooting as the time to save each image file is longer and the blurring caused by camera shake may occur.
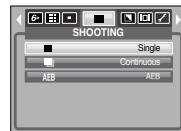
Sharpness

■ You can adjust the sharpness of the picture you are about to take. You cannot check the sharpness effect on the LCD monitor before you take a picture, because this function is applied only when the captured image is stored on the memory.

- Soft : The edges of the image are softened. This effect is suitable for editing images on your PC.
- Normal : The edges of the image are sharp. This is suitable for printing.
- Vivid : The edges of the image are emphasized. The edges will appear sharp, but noise may occur in the recorded image.

OSD (On Screen Display) information

■ In any mode with the exception of VOICE
  RECORDING mode, you can check the recording
  status in the LCD monitor.

OSD INFORMATION
Full
Basic
LCD Save

■ Idle mode : If you select the [LCD Save] and the
               camera isn't operated during the specified
               time(about 30 SEC.), the camera power
               will be idle (LCD monitor : OFF, Camera status lamp : Blinking)
               automatically.
  - To use the camera again, press any of the camera buttons except the power
    button.
  - If there is no operation during the specified time, the camera power will be
    turned off automatically to save battery life. Refer to page 54 for more
    information about the auto power off function.

Starting play mode

■ Turn the camera on and select Play mode by pressing the play mode button
  (▶). The camera can now play back the images stored in the memory.
■ If the memory card is inserted in the camera, all the camera functions apply only
  to the memory card.
■ If the memory card is not inserted in the camera, all the camera functions apply
  only to the internal memory.
● Playing back a still image
  1. Select the PLAY mode by pressing the
     play mode button (▶).

  2. The last image stored on the memory is
     displayed on the LCD monitor.

  3. Select an image that you want to view by
     pressing the LEFT / RIGHT button.

  ※ Press and hold the LEFT or RIGHT
    button to play back the images quickly.

INFORMATION

● Manner mode : Pressing the power button for more than 3 seconds
                 changes the buzzer and start-up sound setting to OFF,
                 even though you may have set these to ON.
● Lightly press the shutter button in Play mode to switch to the currently set
  shooting mode.

Starting play mode

● Playing back a movie clip

1. Select the recorded movie clip that you want to play back by using the LEFT / RIGHT button.
2. Press the play & pause button (▶❚❚) to play back a movie clip file.
   - To pause a movie clip file while playing it back, press the play & pause button again.
   - Pressing the play & pause button again will cause the movie clip file to restart.
   - To rewind the movie clip while it is playing, press the LEFT button. To fast forward the movie clip, press the RIGHT button.
   - To stop playback of the movie clip, press the play & pause button, and then press the LEFT or RIGHT button.

■ Movie clip capture function : capture still images from the movie clip.

● How to capture the movie clip

1. Press the Play & Pause button while playing the movie clip. Then press the E button.
2. The paused movie clip is saved in a new file name.

※ The captured movie clip file has same size as the original movie clip (640X480, 320X240).
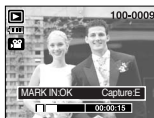
[Paused]

[Press the E button]

■ On camera movie trimming : You can extract desired frames of a movie clip during the movie clip play back.

● If the running time is under 10 seconds, the movie clip can't be trimmed.

1. Press the Pause button at the point of the movie clip that you want to start extracting.
2. Press the OK button. (The start point doesn't display on the status bar, but the start point will be marked.)
3. Press the Play & Pause button and the extracted range will be displayed on the status bar.
4. Press the Play & Pause button once more at the point where you wish the extracted file to stop.
5. Press the OK button and a confirmation window will be displayed.
6. Select a desired sub menu by pressing the Left / Right button and press the OK button.
   [Yes] : The extracted frames are saved as a new file name.
   [No] : The movie trimming will cancel.
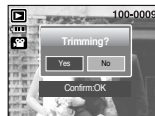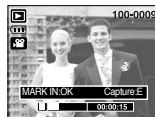
INFORMATION

● If the time line bar passes by the start point by pressing the REW (Left) button, the first frame of the movie clip will display.
● If you don't specify the ending point of the movie clip, the trimming confirmation window will display at the point of the last frame.

Starting play mode

● Playing back a recorded voice
  1. Select the recorded voice that you want to play back by using the LEFT / RIGHT button.
  2. Press the play & pause button (◑◍◐) to play back a recorded voice file.
     - To pause a recorded voice file, while playing it back, press the play & pause button again.
     - To resume playback of the voice file, press the play & pause button
     - To rewind the voice file while it is playing, press the LEFT button. To fast forward the voice file, press the RIGHT button.
     - To stop playback of the voice file, press the play & pause button, and then press the LEFT or RIGHT button.

LCD monitor indicator

■ The LCD monitor displays shooting information about the displayed image.

Play mode
Battery (p.9)
Voice Memo (p.40)
Protect indicator (p.46)
DPOF indicator (p.48)

Folder name and
Stored image number

Using the camera buttons to adjust the camera

■ In Play mode, you can use the buttons on the camera to conveniently set up the Play mode functions.

Play mode button

■ If you have turned on the camera by pressing the POWER button, you can press the PLAY MODE button once to switch to Play mode and press it again to switch to Recording mode.

■ You can turn the power on with the play mode button. The camera is turned on in play mode. Press the play mode button again to turn off the camera.

《38》

Thumbnail / Enlargement button

● You can view multiple pictures, enlarge a selected picture, and crop and save a selected area of an image.

● Thumbnail display

1. While an image is displayed full screen, press the thumbnail button.
2. The thumbnail display will highlight the image that had been showing at the time the thumbnail mode was selected.
3. Press the 5 function button to move to a desired image.
4. To view an image separately, press the enlargement button.
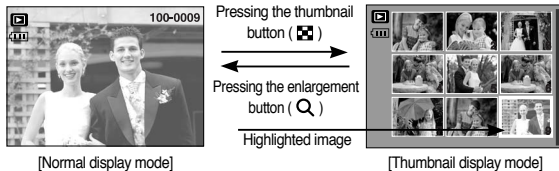
[Normal display mode]

Pressing the thumbnail button (▦)

Pressing the enlargement button (🔍)

Highlighted image

[Thumbnail display mode]

● Image enlargement

1. Select an image that you want to enlarge and press the enlargement button.
2. Different parts of the image can be viewed by pressing the 5 function button.
3. Pressing the thumbnail button will zoom back to the original full sized image.
   - You can tell whether the image displayed is an enlarged view by checking the image enlargement indicator shown at the bottom left of the LCD monitor. (If the image is not an enlarged view, the indicator will not be displayed.) You can also check the area of enlargement.
   - Movie clips and WAV files can't be enlarged.
   - If an image is enlarged, a loss of quality may occur.
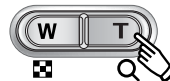
● The maximum enlargement in proportion to the image size.

Image size	2816	2592	2272	2048	1600	1024	640
Maximum enlargement	X11.0	X10.0	X8.8	X8.0	X6.2	X4.0	X2.5

Thumbnail / Enlargement button

● Trimming : You can extract part of the image and save it separately.
  1. Select an image that you want to enlarge and press the enlargement button.
  2. Different parts of the image can be viewed by pressing the 5 function button.
  3. Press the MENU button and a message will be displayed as shown alongside.
  4. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
     [Yes] : The trimmed image will save as a new file name, and display on the LCD monitor.
     [No] : The trimming menu will disappear.
  ※ If there is insufficient memory space to save the trimmed image, the image can't be trimmed.
  ※ To delete the enlarged image during the trimming function, press the delete button.

Voice (🎤) memo / Up button

■ When the menu is displayed on the LCD monitor, the UP button operates as a direction button.

■ When the menu is not displayed on the LCD monitor, the UP button operates as the voice memo button. You can add your voice to a stored still image.

● Adding a Voice Memo to a Still Image
  1. Press the LEFT / RIGHT button to select an image that you wish to add sound to.
  2. Press the voice memo button (🎤) and the voice memo indicator will display. The camera is now ready to record a voice memo.
  3. Press the shutter button to start recording and voice will be recorded to the still image for 10 seconds. While the voice is recording, the recording status window will be displayed as shown alongside. The recording can be stopped by pressing the shutter button again.
  4. The (🔊) icon will be displayed on the LCD monitor after voice memo recording has finished.
     - The voice memo will be saved in * .wav format, but has the same file name as the still image to which it corresponds.
     - If you add a new voice memo to the still image that already has a voice memo, the existing voice memo will be erased.

Play & Pause (⏸) / Down button

■ In Play mode, the play & pause/ down button works as follows:
  - If the menu is displayed
    Press the DOWN button to move from the main menu to a sub menu, or to move down the sub menu cursor.
  - If a still image with a voice memo, a voice file, or a movie clip is playing
    In Stop mode : Plays a still image with a voice memo, a voice file, or a movie clip.
    During playback : Temporarily stops playback.
    In Pause mode : Resumes playback

Left / Right / Menu / OK button

■ LEFT / RIGHT / MENU / OK buttons activate the following.
  - LEFT button   : While the menu is showing, the LEFT button operates as a direction button. While the menu is not showing, press the LEFT button to select the previous image.
  - RIGHT button   : While the menu is showing, the RIGHT button operates as a direction button. While the menu is not showing, press the RIGHT button to select the next image.
  - MENU button   : When you press the MENU button, the play mode menu will be displayed on the LCD monitor. Pressing it again will return the LCD to the initial display.
  - OK button   : When the menu is displayed on the LCD monitor, the OK button is used for confirming data that is changed by using the 5 function button.

E (Effect) button

■ By using the camera's digital processor, it is possible to add special effects to your images.

  1. Press the E button.
  2. Select a desired sub menu and press the OK button.

     ● : Captured images will be stored in black and white.
     ● : Captured images will be stored in a sepia tone.
     ● : Captured images will be stored in a blue tone.
     ● : Captured images will be stored in a red tone.
     ● : Captured images will be stored in a green tone.
     ● : Save the image in negative mode.
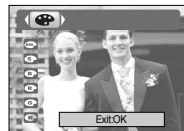
Delete (🗑) button

■ This deletes images stored on the memory card.

  1. Select an image that you want to delete by pressing the LEFT / RIGHT button and press the DELETE (🗑) button.
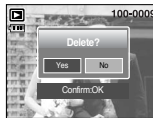
  2. Select the sub menu values by pressing the Left / Right button and then press the OK button.
     If [Yes] is selected : deletes the selected images.
     If [No] is selected   : cancels "Delete Image".

Setting up the play back function using the LCD monitor

■ PLAY mode functions can be changed by using the LCD monitor. In the PLAY mode, pressing the MENU button displays the menu on the LCD monitor. The menus you can set up in Play mode are as follows. To capture an image after setting up the play menu, press the PLAY mode button or shutter button.

Menu tab	Main menu	Sub menu	Secondary menu	Page
🖳	SLIDE	Show	Play, Repeat Play	p.44
		Interval	1, 3, 5, 10 sec	
		Effect	OFF	
			▢ ▨ ▨ ▨ ▧ MIX	
🔳	OSD INFORMATION	Full	-	p.45
		Basic	-	
		OSD Off	-	
🔲	ROTATE	Right 90°	-	p.45
		Left 90°	-	
		180°	-	
		Horizontal	-	
		Vertical	-	
🖼	RESIZE	2592X1944	-	p.46
		2272X1704	-	
		2048X1536	-	
		1600X1200	-	
		1024X768	-	
		640X480	-	
		User Image 1,2	-	

Menu tab	Main menu	Sub menu	Secondary menu	Page
🔒	PROTECT	Select	Unlock/ Lock	p.46
		All Pics		
🗑	DELETE	Select	-	p.47
		All Pics	-	
📇	COPY TO CARD	No	-	p.47
		Yes	-	
🅳	DPOF	Standard	Select/ All Pics/ Cancel	p.48
		Index	No/ Yes	
		Size	Select/ All Pics/ Cancel	

■ This menu is available while the camera is connected to a PictBridge supporting printer (direct connection to the camera, sold separately) with a USB cable.

Menu tab	Main menu	Sub menu	Secondary menu	Page
S/I	IMAGES	One Pic	-	p.50
		All Pics	-	
A	AUTO SET	No	-	p.50
		Yes	-	
C	CUSTOM SET	Size	Auto	p.51
			PostCard	
			Card	
			4X6	
			L	
			2L	
			Letter	
			A4	
			A3	
		Layout	Auto	
			Full	
			1	
			2	
			4	
			8	
			9	
			16	
			Index	

Menu tab	Main menu	Sub menu	Secondary menu	Page
C	CUSTOM SET	Type	Auto	p.51
			Plain	
			Photo	
			FastPhoto	
		Quality	Auto	
			Draft	
			Normal	
			Fine	
		Date	Auto	
			Off	
			On	
		File Name	Auto	
			Off	
			On	
P	PRINT	Standard	-	p.51
		Index	-	
D	DPOF PRINT	No	-	p.51
		Yes	-	
C	RESET	No	-	p.52
		Yes	-	

※ Menus are subject to change without prior notice.

Starting the slide show

■ Images can be displayed continuously at pre-set intervals. You can view the slide show by connecting the camera to an external monitor.

1. Select the [Show] sub menu by pressing the UP / DOWN button and press the RIGHT button.
2. Use the Up / Down buttons to select the desired sub menu.

   [Play] selected : The slide show is closed after one cycle.

   [Repeat Play] selected : The slide show is repeated until cancelled.

3. Press the OK button to start the slide show.
   - Press the Pause button to pause the slide show.
   - Press the Pause button (▶❚❚) again to resume the slide show.
   - To stop the slide show, press the play & pause button, and then press the LEFT or RIGHT button.

● Setting play interval : Set the slide show play interval.
1. Select the [Interval] sub menu by pressing the UP / DOWN button and press the RIGHT button.
2. Use the Up / Down buttons to select the desired interval.
3. Press the OK button to save the configuration.

INFORMATION

● The loading time depends on the image size and quality.
● While the slide show is playing, only the first frame of a MOVIE file is displayed.
● While the slide show is playing, the voice recording file will not display.

● Configure slide show effects : Unique screen effects can be used for the slide show.
1. Select the [Effect] sub menu by pressing the UP / DOWN button and press the RIGHT button.
2. Use the Up / Down Button to select the type of effect.
   - OFF : Normal display.
   - ▣ : Image is displayed slowly.
   - ▨ : Image is displayed slowly from the centre outwards.
   - ◪ : Image moves from the top left.
   - ◩ : The image slides diagonally from top left to bottom right.
   - MIX : The image slides irregularly.
3. Press the OK button to confirm the setting.

On Screen Display information

- You can check shooting information about the displayed image.

  1. Select a desired sub menu by pressing the
     UP / DOWN button and press the OK button.

     OSD INFORMATION
     Full
     Basic
     OSD Off

[Full]　　　　　　[Basic]　　　　　　[OSD Off]
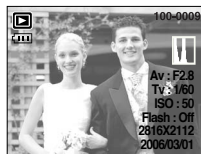
Histogram
Aperture value
Shutter speed
ISO value
Whether or not the flash is used
Size
Recording date

Av : F2.8
Tv : 1/60
ISO : 50
Flash : Off
2816X2112
2006/03/01

※ Histogram shows you the distribution of
brightness in recorded images. If the bars in
the histogram are higher towards the right, the
image may be too bright. If the bars are higher
on the left, the image may be too dark. If the
lighting conditions are too bright to check the
subject by using the LCD, checking the
histogram will enable more precise exposure
control for the shots.

Pixel

Distribution of brightness
Dark　　　　　Bright
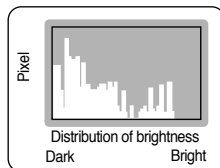
Rotating an image

- You can rotate the stored images by various degrees. Once the playback of the
  rotated picture is finished, it will switch back to the original state.

  1. Select a desired sub menu by pressing the
     UP / DOWN button.

     ROTATE
     Right 90°
     Left 90°
     180°
     Horizontal
     Vertical
     Exit:MENU　　　　Move:↕
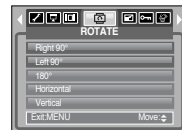
[Before rotating the image]　　　[Right 90°]　　　[Left 90°]

[180°]　　　　　[Horizontal]　　　[Vertical]

2. Press the OK button and the rotated image will be displayed. If you display the
   rotated image on the LCD monitor, empty spaces may appear to the left and
   right of the image.

《45》

Resize

■ Change the resolution (size) of pictures taken. Select the [User Image] to save an image to be the start-up image. The resized image will have a new file name.

1. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.

```
RESIZE
5ᴹ    2592X1944
4ᴹ    2272X1704
3ᴹ    2048X1536
2ᴹ    1600X1200
1ᴹ    1024X768
Exit:MENU      Move:≑
```
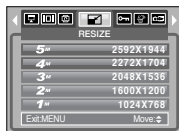
● Image Resize Types

Resize	2592X1944	2272X1704	2048X1536	1600X1200	1024X768	640X480	User Image 1,2
6M	O	O	O	O	O	O	O
5M	X	O	O	O	O	O	O
4M	X	X	O	O	O	O	O
3M	X	X	X	O	O	O	O
2M	X	X	X	X	O	O	O
1M	X	X	X	X	X	O	O
VGA	X	X	X	X	X	X	O

● A large sized image can be resized to a smaller sized image, but not vice versa.
● Only JPEG images can be resized. Movie clip (AVI), Voice recording (WAV) files can't be resized.
● You can change the resolution of only those files compressed in the JPEG 4:2:2 format.
● The resized image will have a new file name. The [User Image] image is stored not on the memory card but on the internal memory.
● Only two [User Image] images can be saved.
● If the memory capacity is insufficient to store the resized image, the resized image will not be stored.

Protecting images

■ This is used to protect specific shots from being accidentally erased (Lock). It also unprotects images that have been previously protected (Unlock).

● Protecting Images
1. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
   [Select] : Selection window for an image to be protected / released is displayed.
   - Up / Down / Left / Right : Select an image
   - Zoom W / T Button : Protect / release the image
   - OK Button : Your changes will be saved and the menu will disappear.
   [All Pics] : Protect / release all saved images
   - Zoom W / T Button : Protect / release the images
   - OK Button : Your changes will be saved and the menu will disappear.
- If you protect an image, the protect icon will be displayed on the LCD monitor.
  (An unprotected image has no indicator)
- An image in LOCK mode will be protected from the delete function, but will NOT be protected from the format function.
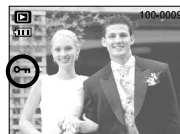
Deleting images

■ Of all the files stored in the memory card, the unprotected files in the DCIM subfolder will be deleted. Remember that this will permanently delete unprotected images. Important shots should be stored on a computer before deletion takes place. The startup image and SKIN image are stored in the camera's internal memory (i.e., not on the memory card) and it will not be deleted even if you delete all files on the memory card.

● Deleting images
1. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
   [Select] : Selection window for an image to delete is displayed.
   - Up / Down / Left / Right : Select an image
   - Zoom T Button : Select the image for deletion. (V mark)
   - OK Button : Press the OK Button to display the confirmation message. Select the [Yes] menu and press the OK button to delete marked images.
   [All Pics] : Displays confirmation window. Select the [Yes] menu and press the OK button to delete all unprotected images. If there aren't protected images, all the images are deleted and a [No Image!] message will display.
2. After deletion, the screen will be changed to the play mode screen.
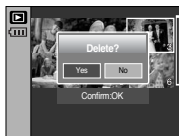
Copy To Card

■ This enables you to copy image files, movie clips and voice recording files on the camera's built-in internal memory to the camera's removable SD memory card.

● Copying to the Memory Card
1. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
   - [No] : Cancels "Copy to Card".
   - [Yes] : All images, movie clips and voice recording files saved in the internal memory are copied to the memory card after the [Processing!] message is displayed. After copying has been completed, the screen will return to play mode.
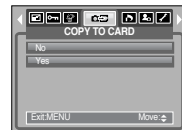
INFORMATION

● When this menu is selected without inserting a memory card, you can select the [COPY TO CARD] menu but the menu can't be run.
● If there is not enough space available in the memory card to copy saved images in the internal memory (23MB), the [COPY TO CARD] command will copy only some of the images and display [Memory Full!] message. Then the system will return to the playback mode. Please be sure to delete any unnecessary files to free up space before inserting the memory card into the camera.
● When you move images from the internal memory to the removable SD card, they will be automatically renumbered to avoid duplication of the file name. If the last file in the memory card is STP60001.jpg, the copied file names start from STP60002.jpg. After completing [COPY TO CARD], the last stored image of the last copied folder is displayed on the LCD monitor.

DPOF

- DPOF (Digital Print Order Format) allows you to embed printing information on your memory card's MISC folder. Select the pictures to be printed and how many prints to make.
- The DPOF indicator will display on the LCD monitor when an image that has DPOF information plays back. Images can then be printed on DPOF printers, or at an increasing number of photo labs.
- This function is not available for Movie clips and Voice recording files.
- If a memory card is not inserted, the menus are still displayed in the LCD, but are not selectable.

DPOF : STANDARD

- This function allows you to embed print quantity information on a stored image.

  1. Select the [Standard] menu by pressing the UP / DOWN button and press the RIGHT button.
  2. Select a desired sub menu by pressing the UP / DOWN button.
     [Select] : Selection window for an image to print is displayed.
     - Up / Down / Left / Right : Select an image to print.
     - Zoom W / T Button : Select the number of prints.
     [All Pics] : Configure number of prints for all pictures except movie and voice files.
     - W / T button : Select a number of prints
     [Cancel] : Cancel the print setup.
  3. Press the OK button to confirm the setting.
     If an image carries DPOF instructions, the DPOF indicator (🖶) will show.
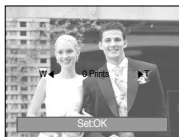
DPOF : Index

- Images (except for movie clips and voice file) are printed as index type.

  1. Select the [Index] menu by pressing the UP / DOWN button and press the RIGHT button.
  2. Select a desired sub menu by pressing the UP / DOWN button.
     If [No] is selected : Cancel the index print setting.
     If [Yes] is selected : The image will be printed in index format.
  3. Press the OK button to confirm the setting.
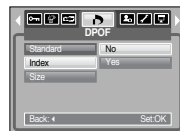
DPOF : Print size

■ You can specify the print size when printing images stored on the memory card. The [Size] menu is available only for DPOF 1.1 compatible printers.

● Setting the Print Size
  1. Select the [Size] menu by pressing the UP / DOWN button and press the RIGHT button.
  2. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
     [Select] : Selection window for an image to be changed printed size is displayed.
     - Up / Down / Left / Right : Select an image.
     - Zoom W / T Button : Change the print size.
     - OK button : Your changes will be saved and the menu will disappear.
     [All Pics] : Change print size of all saved images.
     - W / T button : Select a print size
     - OK button : Confirm the changed setting.
     [Cancel] : Cancel all of the print size settings.
  ※ DPOF [Size] secondary menu : Cancel, 3X5, 4X6, 5X7, 8X10
  ※ Depending on the manufacturer and printer model, cancelling the printing may take a little longer for the printer to process.
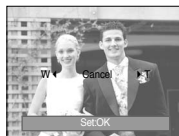
PictBridge

■ You can use the USB cable to connect this camera to a printer that supports PictBridge (sold separately) and print the stored images directly. Movie clips and voice files cannot be printed.

■ Setting up the camera for connection with the printer
  1. In any mode with the exception of Voice Recording mode, press the MENU button.
  2. Press the LEFT / RIGHT button and select [SETUP] menu tab.
  3. Select [USB] menu by pressing the UP / DOWN button and press the RIGHT button.
  4. Select [Printer] menu by pressing the UP / DOWN button and press the OK button.
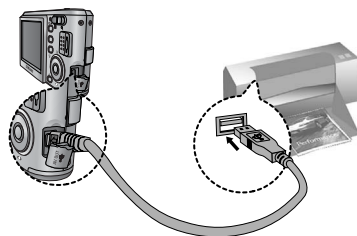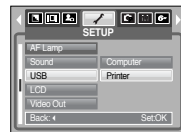
※ If you selected [COMPUTER] in Step 5, when you connect the camera to your printer, the [USB ERROR!] message will display and the connection will not be established. In this case, disconnect the USB cable, and then follow the procedure from Step 2 onwards.

PictBridge : Picture Selection

■ If you select [Computer] sub menu in the [USB] setup menu, [Connecting Computer] message will display when you connect the camera to your printer and the connection will not be established. In this case, press the Printer button. [Connecting Printer] message will display and the Easy printing mode will be selected.

* In some instances the camera may not connect to the printer, this will depend on the manufacturer of the printer.

■ Easy printing
When you connect the camera to printer in the Play back mode, you can print a picture easily.
- Pressing the Printer (🖶) button :
The currently displayed image will be printed with the printer's default setting.
- Pressing the Left / Right button :
Selects a previous / next image.

141-0001

Print: 🖶   Menu:Ok

■ Select pictures to print
1. Press the Menu button.
2. The [Images] menu will appear.
3. Use the UP and DOWN buttons to select the desired submenu value, and then press the OK button.
When [One Pic] is selected :
The PictBridge function will be applied only to the picture currently displayed.
When [All Pics] is selected :
The PictBridge function will be applied to all pictures, excluding movie clips and voice files.

S/I

IMAGES

One Pic
All Pics

Move: ◆
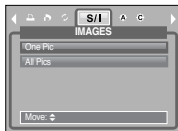
● Setting the Number of Copies to Print
- Select [One Pic] or [All Pics]. A screen where you can set the number of copies to print will appear as shown below.

W◄ 0 Prints ►T
Set:OK

[When [One Pic] is selected]

W◄ 0 Prints ►
Exit:Shutter   Set:OK
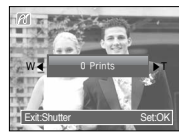
[When [All Pics] is selected]

- Press the Up / Down button to select the number of prints.
- When [One Pic] is selected : Use the Left / Right button to select another picture. After selecting another picture, select the number of prints for another picture.
- After setting the number of prints, press the OK button to save.
- Press the Shutter button to return to the menu without setting the number of prints.

PictBridge : Print Setting

■ AUTO SET
1. Use the LEFT and RIGHT buttons to select the [AUTO SET] menu tab.
2. Use the UP and DOWN buttons to select the desired submenu value, and then press the OK button.
[No] : [CUSTOM SET] values are kept.
[Yes] : All values in the [CUSTOM SET] are automatically changed.

A

AUTO SET

No
Yes

Move: ◆
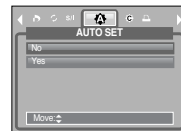
PictBridge : Print Setting

■ Custom Set : You can select the Paper Size, Print Format, Paper Type, Print
Quality, Date Print, and File Name Print menus for printed pictures.

1. Use the LEFT and RIGHT buttons to select the
   [CUSTOM SET] menu tab.
2. Use the UP and DOWN buttons to select the
   desired submenu value, and then press the
   RIGHT button.
3. Use the UP and DOWN buttons to select the
   desired submenu value, and then press the OK
   button.

```
           CUSTOM SET
   Size          Auto
   Layout        Auto
   Type          Auto
   Quality       Auto
   Date          Auto
   Move: ↕
```
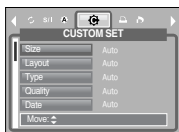
■ The menus you can set up are as follows:

Menu	Function	Sub menu
Size	Set the size of the printing paper	Auto, PostCard, Card, 4X6, L, 2L, Letter, A4, A3
Layout	Set the number of pictures to be printed on a sheet of paper	Auto, Full, 1, 2, 4, 8, 9, 16, Index
Type	Set the quality of the printing paper	Auto, Plain, Photo, FastPhoto
Quality	Set the quality of the picture to be printed	Auto, Draft, Normal, Fine
Date	Set whether to print the date	Auto, Off, On
File Name	Set whether to print the file name	Auto, Off, On

※ Some menu options are not supported on all printers.
  If not supported, the menus are still displayed in the LCD, but are not selectable.
※ If the setting values are not changed in the automatic/ manual setting, the setting
  values are automatically kept.

PictBridge : Print

■ Printing Pictures
  1. Use the LEFT and RIGHT buttons to select the [PRINT] menu tab.
  2. Use the UP and DOWN buttons to select the desired submenu value, and
     then press the OK button.

  [Standard] : Print the pictures stored in the memory
              card in set numbers. One picture is
              printed on one piece of paper.
  [Index]   : Print multiple images on one sheet of
              paper.

```
            PRINT
   Standard
   Index
   Move: ↕
```

3. The screen shown on the right will appear and the
   picture will be printed. If no picture is selected, the
   [No image!] message will be displayed.
   Press the Menu / OK button while printing to cancel
   the printing and the [Images] menu is displayed.

```
        Now Printing
          001 / 001
   Exit:MENU
```

※ Number of pictures on an index print varies
   depends on the printer used.
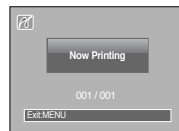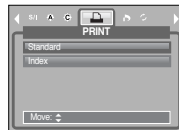
■ DPOF Print : This allows you to directly print the files with DPOF information.

1. Use the LEFT and RIGHT buttons to select the
   [DPOF PRINT] menu tab.
2. Use the UP and DOWN buttons to select the
   desired submenu value, and then press the OK
   button.
   [No] : Cancel the printing
   [Yes] : Directly print the file with the DPOF information

```
          DPOF PRINT
   No
   Yes
   Move: ↕
```

※ Depending on the manufacturer and printer model, some menus may not be
   available. When a printer does not support the DPOF, the menu is still
   displayed but not available.
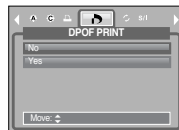
PictBridge : RESET

■ Initialises user-changed configurations.

1. Use the LEFT and RIGHT buttons to select the [RESET] menu tab.
2. Use the UP and DOWN buttons to select the desired submenu value, and then press the OK button.
   If [No] is selected : Settings will not be reset.
   If [Yes] is selected : All print and image settings will be reset.

RESET
No
Yes

Move: ↕
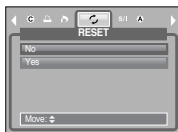
※ Default print setting varies depending on the printer manufacturer. For your printer's default setting, refer to the user's guide that came with your printer.

Setup menu

■ In this mode, you can set up basic settings. You can use the setup menu in all camera modes, except Voice Recording mode.
The items indicated by ▨ are default settings.

Menu tab	Main menu	Sub menu	Secondary menu	Page
	File	Series	-	p.53
		Reset	-	
	Power Off	Off, 1, 3, 5,10min	-	p.54
	Language	ENGLISH	한국어	FRANÇAIS	p.54
		DEUTSCH	ESPAÑOL	ITALIANO	
		简体中文	繁體中文	РУССКИЙ	
		PORTUGUÊS	DUTCH	DANSK	
		SVENSKA	SUOMI	ไทย	
		BAHASA	عربي	Čeština	
		POLSKI	Magyar	Türkçe	
	Format	No	-	p.54
		Yes	-	
	Date&Time	06/03/01 13:00	-	p.55
		yy/mm/dd	-	
		mm/dd/yy	-	
		dd/mm/yy	-	
		Off	-	
	World Time	Seoul	-	p.55
		Tokyo	-	
	Imprint	Off	-	p.55
		Date	-	
		Date&Time	-	
	AF lamp	Off	-	p.55
		On	-	

Setup menu

Menu tab	Main menu	Sub menu	Secondary menu	Page
![icon]	Sound	Off	-	p.55
		Low	-	
		Medium	-	
		High	-	
	USB	Computer	-	p.55
		Printer	-	
	LCD	Dark	-	p56
		Normal	-	
		Bright	-	
	Video Out	NTSC	-	p.56
		PAL	-	
	Quick View	Off, 0.5, 1, 3 sec	-	p.56
	Reset	No	-	p.56
		Yes	-	

※ Menus are subject to change without prior notice.

File name

■ This function allows the user to select the file naming format.

[Series] : New files are named using numbers that follow the previous sequence, even when a new memory card is used, or after formatting, or after deleting all pictures.

[Reset] : After using the reset function, the next file name will be set from 0001 even after formatting, deleting all or inserting a new memory card.

INFORMATION

● The first stored folder name is 100SSCAM, and the first file name is STP60001.
● File names are assigned sequentially from STP60001 → STP60002 → ~ → STP69999.
● The folder number is assigned sequentially from 100 to 999 as follows: 100SSCAM → 101SSCAM → ~ → 999SSCAM.
● The files used with the memory card conform to the DCF (Design rule for Camera File systems) format. If you change the image file name, the image may not play back.

Auto power off

■ This function switches the camera off after a specified period in order to prevent unnecessary battery drainage.

[Off]   : The power off function will not operate.

[1, 3, 5, 10 min] : The power will turn off automatically if not used for the period of time specified.

	SETUP	
File	Off	
Power Off	1 min	
Language	3 min	
Format	5 min	
Date&Time	10 min	
Back: ◄		Set:OK

INFORMATION

● After replacing the battery, the power off setting will be preserved.
● Note that the automatic power off function will not operate if the camera is in PC mode, slide show, playing back a voice recording, playing back a movie clip and taking a composite shot.

Language

■ There is a choice of languages that can be displayed on the LCD monitor. Even if the battery and AC charger are removed and inserted again, the language setting will be preserved.

LANGUAGE sub menu :
English, Korean, French, German, Spanish, Italian, S.Chinese, T.Chinese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Thai, BAHASA (MALAY/ INDONESIAN), Arabic, Czech, Polish, Hungarian and Turkish.

	SETUP	
File	ENGLISH	
Power Off	한국어	
Language	FRANÇAIS	
Format	DEUTSCH	
Date&Time	ESPAÑOL	
Back: ◄		Set:OK

Format

■ This is used for formatting the memory. If you run [Format] on the memory, all images, including the protected images, will be deleted. Be sure to download important images to your PC before formatting the memory.

If [No] is selected   : The memory card will not be formatted. Press the menu button twice and the menu display will disappear.

If [Yes] is selected : A [Processing!] message appears and the memory card will be formatted. If you ran FORMAT in Play mode, a [No Image!] message will appear.

	SETUP	
Power Off		
Language	No	
Format	Yes	
Date&Time		
World Time		
Back: ◄		Set:OK
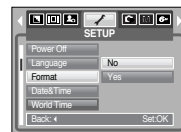
INFORMATION

● Be sure to run [Format] on the following types of memory card.
  - A new memory card or an unformatted memory card.
  - A memory card that has a file this camera can't recognise or one that has been taken from another camera.
● Always format the memory card using this camera. If you insert a memory card that has been formatted using other cameras, memory card readers, or PCs, you will get a [Card Error!] message.

Setting up the Date / Time / Date type

■ You can change the date and time that will be displayed on the captured images and set up the date type.

RIGHT button : Selects the year / month / day / hour / minute date type.

LEFT button : Moves the cursor to the [Date&Time] main menu if the cursor is at the first item of the date and time setup. In all other cases, the cursor will be shifted to the left of its current position.

UP and DOWN buttons : Changes the setting value.

SETUP
Language	▲
Format	06/03/01
Date&Time	▼
World Time	13 : 00
Imprint	yy/mm/dd
Back : ◄	Set:OK
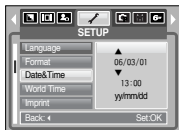
World Time

■ This menu enables you to display the local date and time on the LCD monitor.

SETUP
Format	Seoul
Date&Time	Tokyo
World Time	
Imprint	
AF Lamp	
Back : ◄	Set:OK

SETUP

Seoul, Tokyo
2006/03/01 15:08
Set:OK

Imprinting the recording date

■ There is an option to include DATE / TIME on still images.

[Off] : The DATE & TIME will not be imprinted on the image file.
[Date] : Only the DATE will be imprinted on the image file.
[Date&Time] : The DATE & TIME will be imprinted on the image file.

SETUP
Date&Time	Off
World Time	Date
Imprint	Date&Time
AF Lamp	
Sound	
Back : ◄	Set:OK

※ The Date & Time are imprinted at the bottom right side of the still image.

※ The imprint function is applied only to still images except for the images taken in the [Text] scene mode and photo frame effect mode.

Auto Focus lamp

■ You can turn the Auto Focus lamp on or off.

If [Off] is selected : The AF lamp will not light up.
If [On] is selected : The AF lamp will light up.

SETUP
World Time	
Imprint	Off
AF Lamp	On
Sound	
USB	
Back : ◄	Set:OK

※ If you select [Off] menu and take an image in poorly lit conditions or select the [Night] scene mode, the camera may not be able to focus accurately.

※ The Auto Focus lamp will function while using the self-timer even if the configuration is set to off.

Sound

■ If you set the operation sound to on, various sounds will be activated for camera start-up and when buttons are pressed, so that you are aware of the camera's operation status.

SETUP
Imprint	Off
AF Lamp	Low
Sound	Medium
USB	High
LCD	
Back : ◄	Set:OK

Connecting an External Device (USB)

■ You can select an external device to which you want to connect the camera using the USB cable.

[Computer] : Select this if you want to connect the camera to your PC. Refer to page 66 for instructions on how to connect the camera to your PC.

[Printer] : Select this if you want to connect the camera to your printer. Refer to page 49 for instructions on how to connect the camera to your printer.

SETUP
AF Lamp	
Sound	Computer
USB	Printer
LCD	
Video Out	
Back : ◄	Set:OK

Selecting Video out type

■ The Movie output signal from the camera can be NTSC or PAL. Your choice of output will be governed by the type of device (monitor or TV, etc.) to which the camera is connected. PAL mode can support only BDGHI.

SETUP

USB	
LCD	NTSC
Video Out	PAL
Quick View	
Reset	
Back: ◄	Set:OK

Yellow - Video
White - sound
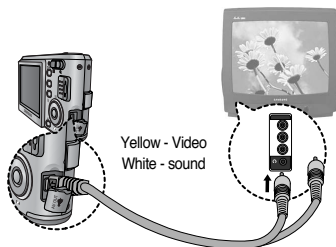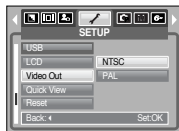
INFORMATION

● NTSC : U.S.A, Canada, Japan, South Korea, Taiwan, Mexico.
● PAL : Australia, Austria, Belgium, China, Denmark, Finland, Germany, U.K., Holland, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway.
● When using a TV as an external monitor, you will need to select the external or AV channel of the TV.
● There will be a digital noise on the external monitor, but it is not a malfunction.
● If the image is not in the centre of the screen, use the TV controls to centre it.
● The menu functions are the same as those indicated on the LCD monitor.

LCD brightness

■ You can adjust the LCD brightness.

SETUP

SOund	Dark
USB	Normal
LCD	Bright
Video Out	
Quick View	
Back: ◄	Set:OK

Quick view

■ If you enable Quick View before capturing an image, you can view the image you just captured on the LCD monitor for the duration set in the [Quick View] setup. Quick view is possible only with still images.

[Off]   : The quick view function can't be activated.
[0.5, 1, 3sec] : The captured image is briefly displayed during the selected time.

SETUP

USB	off
LCD	0.5 sec
Video Out	1 sec
Quick View	3 sec
Reset	
Back: ◄	Set:OK

Initialisation

■ All camera menu and function settings will be restored to their default values. However, values for DATE / TIME, LANGUAGE, and VIDEO OUT will not be changed.

If [No] is selected :
Settings will not be restored to their defaults.
If [Yes] is selected :
All settings will be restored to their defaults.

SETUP

USB	
LCD	
Video Out	
Quick View	No
Reset	Yes
Back: ◄	Set:OK

Setting up the Mycam menu

■ YYou can set up a start up image, start up sound and shutter sound. Every working mode of camera with the exception of Voice recording mode has the MyCAM menu.
The items indicated by [   ] are default settings.

Menu tab	Main menu	Sub menu		Page
![icon]	Start Image	Off	LOGO	p.57
		User Image 1	User Image 2	
	Start Sound	Off	Sound 1	p.57
		Sound 2	Sound 3	
	Shutter Sound	Off	Sound 1	p.57
		Sound 2	Sound 3	

※ Menus are subject to change without prior notice.

Start up image

■ You can select the image that is first displayed on the LCD monitor whenever the camera is turned on.

MYCAM
Start Image
Start Sound
Shutter Sound
Back: ◄   Set:OK

INFORMATION

● Use a saved image for the start-up image with the [User Image] in the [RESIZE] menu in the play mode.
● The start-up image will not be deleted by deleting all images or [Format] menu.
● The User images will be deleted by [Reset] menu.

Start up sound

■ You can select the sound that is activated whenever the camera is turned on.

MYCAM
Start Image   Off
Start Sound   Sound 1
Shutter Sound Sound 2
               Sound 3
Back: ◄   Set:OK

INFORMATION

● If the start up image is set to [Off], the start up sound will not activate, even though you may have set these to on.

Shutter sound

■ You can select the shutter sound.

MYCAM
Start Image   Off
Start Sound   Sound 1
Shutter Sound Sound 2
               Sound 3
Back: ◄   Set:OK

Important notes

Be sure to observe the following precautions!

■ This unit contains precision electronic components. Do not use or store this unit in the following locations.
- Areas exposed to severe changes in temperature and humidity.
- Areas exposed to dust and dirt.
- Areas exposed to direct sunlight or the inside of a vehicle in hot weather.
- Environments where there is high magnetism or excessive vibration.
- Areas with high explosives or highly flammable materials.

■ Do not leave this camera in places subject to dust, chemicals (like naphthalene and mothball), high temperature and high humidity.
Keep this camera with silica gel in a hermetically sealed box when not planning to use the camera for a long period of time

■ Sand can be particularly troublesome to cameras.
- Do not let sand get inside the camera when using it on beaches, coastal dunes, or other areas where there is lots of sand.
- Doing so may result in failure or may permanently render the camera unusable.

■ Handling the camera
- Never drop the camera or subject it to severe shocks or vibrations.
- Protect the large size LCD monitor from an impact. When this camera is not being used, keep it in the camera case.
- Avoid obstructing the lens or the flash when you capture an image.
- This camera is not waterproof.
  To avoid dangerous electrical shocks, never hold or operate the camera with wet hands.
- If you use this camera in wet places, such as beach or pool, do not let water or sand get inside the camera. Doing so may result in failure or may permanently damage the unit.

■ Extremes in temperature may cause problems.
- If the camera is transferred from a cold to a warm and humid environment, condensation can form on the delicate electronic circuitry. If this occurs, turn the camera off and wait for at least 1 hour until all moisture is dispersed. Moisture built up can also occur in the memory card. If this happens, turn off the camera and remove the memory card. Wait until the moisture has dispersed.

■ Caution on Using the Lens
- If the lens is subjected to direct sunlight, it could result in discoloration and deterioration of the image sensor.
- Pay attention not to get fingerprints or foreign substances on the surface of the lens.

■ If the digital camera is not used for a long period, an electric discharge can occur. It is a good idea to remove the battery and the memory card if you do not intend to use the camera for an extended period of time.

■ If the camera is exposed to an electronic interference, it will turn itself off to protect the memory card.

■ Camera Maintenance
- Use a soft brush (available from photo stores) to gently clean the lens and LCD assemblies. If this does not work, lens-cleaning paper with lens cleaning fluid can be used.
  Clean the camera body with a soft cloth. Do not allow this camera to come into contact with solvent materials such as benzol, insecticide, thinners etc. This may damage the body shell of the camera and also affect its performance. Rough handling can damage the LCD monitor. Take care to avoid damage and keep the camera in its protective carry case at all times when not in use.

■ Do not attempt to disassemble or modify the camera.

Important notes

■ Under certain conditions, static electricity can cause the flash unit to fire. This is not harmful to the camera and is not a malfunction.

■ When images are uploaded or downloaded (when the charger and USB cable are inserted into the cradle (optional) at the same time), the data transfer may be affected by static electricity.
In this case, disconnect and re-connect the USB cable before trying the transfer again.

■ Before an important event or going on a trip, you should check the camera condition.
- Take a picture to test the camera's condition, and prepare spare batteries.
- Samsung cannot be held responsible for camera malfunctions.

Warning indicator

■ There are several warnings that may appear on the LCD display

Card Error!
• Memory card error
  → Turn off the camera power and turn it on again
  → Insert the memory card again
  → Insert the memory card and format the memory card. (p.54)

Card Locked!
• The memory card is locked
  → SD memory card : Slide the write protect switch to the top of the memory card

Memory Full!
• There is insufficient memory capacity to take an image
  → Insert a new memory card
  → Delete unnecessary image files to free up some memory

No Image!
• There are no images stored on the memory
  → Take images
  → Insert a memory card that is holding some images

File Error!
• File error
  → Format the memory card
• Memory card error
  → Contact a camera service centre

Low Battery!
• There is low battery capacity
  → Insert fresh batteries.

Low Light!
• When taking pictures in dark places
  → Take pictures in Flash Photography mode.

Out Of Number
• When selecting too many printing pages in the PictBridge menu.
  → Select printing page within the limitation.

Before contacting a service centre

■ Please check the following

The camera doesn't switch on
• There is low battery capacity
  → Insert fresh batteries. (p.9)
• The battery may be inserted incorrectly.
  → Insert the battery according to the polarity marks (+, -)
• The battery is not inserted
  → Insert the battery and turn on the camera

The camera power ceases while in use
• The battery are exhausted
  → Insert charged battery
• The Camera is turned off automatically
  → Turn on the camera power again.

Battery power quickly drains
• The Camera is being used in low temperatures
  → Keep the camera in warm conditions (i.e. inside a coat or jacket) and only remove it in order to take images

Camera does not take images when pressing the Shutter button
• There is insufficient memory capacity
  → Delete unnecessary image files
• The memory card has not been formatted
  → Format the memory card (p.54)
• The memory card is exhausted
  → Insert a new memory card
• The memory card is locked
  → Refer to [Card Locked!] error message
• The camera's power is off
  → Turn the camera power on

• The battery is exhausted
  → Insert fresh batteries.
• Battery is inserted incorrectly with the polarities reversed
  → Insert the battery according to the polarity marks (+, -)

The camera suddenly stops working while in use
• The camera stopped due to a malfunction
  → Remove /re-insert battery and switch the camera on

The images are unclear
• A picture was taken without setting an appropriate macro mode
  → Select an appropriate macro mode to take a clear image.
• The picture was taken with the subject beyond the flash range
  → Take a picture within the flash range
• The lens is smudged or dirty
  → Clean the lens

The flash does not fire
• Flash off mode has been selected
  → Dis-engage flash off mode
• The camera mode can't use the flash
  → Refer to the FLASH instruction (p.20)

Incorrect date and time is displayed
• The date and time have been set incorrectly or the camera has adopted the default settings
  → Reset the date and time correctly

The camera buttons do not operate
• Camera malfunction
  → Remove / re-insert battery and switch the camera on

A card error has occurred while the memory card is in the camera.
• Incorrect memory card format
  → Re-format the memory card

Before contacting a service centre

The images don't play back
- Incorrect file name (Violation of DCF format)
  → Do not change the image file name

Colour of image is different to the original scene
- White balance or effect setting is incorrect
  → Select appropriate White balance and effect

Images are too bright
- Exposure is excessive
  → Reset exposure compensation

No image on external monitor
- The external monitor has not been connected properly with the camera
  → Check the connection cables
- There are incorrect files in the memory card
  → Insert a memory card that has correct files

When using the PC's explorer, the [Removable Disk] file does not show
- Cable connection is incorrect
  → Check the connection
- The camera is off
  → Turn the camera on
- The operating system is not Windows 98, 98SE, 2000, ME, XP/ Mac OS 9.0 ~ 10.3. Alternatively the PC does not support USB.
  → Install Windows 98, 98SE, 2000, ME, XP/ Mac OS 9.0 ~ 10.3 to PC that supports USB.
- The camera driver is not installed
  → Install a [USB Storage Driver]

Specifications

- Image Sensor
  - Type : 1/2.5" CCD - Effective Pixel : Approx. 6.0 Mega-pixel - Total Pixel : Approx. 6.2 Mega-pixel
- Lens
  - Focal Length : SHD Lens f = 5.8 ~ 17.4mm (35mm equivalent : 35 ~ 105mm)
  - F No. : F2.8 ~ F4.9
  - Digital Zoom : · Still Image mode : 1.0X ~ 5.0X
    · Play mode : 1.0X ~ 11.0X (depends on image size)
- LCD Monitor : 2.4" color TFT LCD (112,320 pixel)
- Focusing
  - Type : TTL contrast auto focus
  - Range

	Normal	Macro	Auto Macro
Wide	80cm ~ infinity	5~80cm	5cm~infinity
Tele		40~80cm	40cm~infinity

- Shutter
  - Type : Mechanical and Electronic shutter
  - Speed : 2 ~ 1/2,000 sec. (Night Mode : 15 ~ 1/2,000 sec.)
- Exposure
  - Control : Program AE   Metering : Multi, Spot
  - Compensation : ±2EV (0.5 EV steps)
  - ISO Equivalent : Auto, 50, 100, 200, 400
- Flash
  - Modes : Auto, Auto & Red-eye reduction, Fill-in flash, Slow sync, Flash off
  - Range : Wide : 0.2 ~ 3.0m, Tele : 0.4 ~ 2.0m (ISO AUTO)
  - Recharging Time : 4.0sec (Full), 5.0sec (Low battery)
- Sharpness : Soft, Normal, Vivid
- Effect : Color, B&W, Sepia, Red, Green, Blue, Negative, RGB, Highlight, Composite, Frame
- White Balance : Auto, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom
- Voice Recording : Voice Recording (Memory & Battery capacity dependant)
  Voice Memo in Still Image (Max. 10 sec.)

Specifications

- Date Imprinting : Date&Time, Date, Off (user selectable)
- Shooting
  - Still Image : · Modes : Auto, Program, Scene, Voice Recording
    - ※ 11 Scene (Night, Portrait, Children, Landscape, Close-up, Sunset, Dawn, Backlight, Firework, Beach & Snow, Text)
    - · Shooting : Single, Continuous, AEB
    - · Self-timer : 10 sec., 2 sec., Double self timer (10sec. & 2sec.)
  - Movie Clip : · With Audio or without Audio (user selectable, recording time : memory capacity dependent)
    - · Size : 640x480, 320x240 (3X Optical Zoom (Mute during Zoom Operation))
    - · Frame rate : 30 fps, 15 fps
    - · Movie Stabiliser (User Selectable)
    - · Movie Editing (Embedded) : Pause during recording, Still Image Capture, Time Trimming
- Storage
  - Media : Internal memory : Approx. 23MB flash memory
    External memory : SD card / MMC (Up to 1GM Guaranteed)
  - File Format : Still Image : JPEG (DCF), EXIF 2.2, DPOF 1.1, PictBridge 1.0
    Movie Clip : AVI (MPEG-4)   Audio : WAV
  - Image Size

6M	5M	4M	3M	2M	1M	VGA
2816x2112	2592x1944	2272x1704	2048x1536	1600x1200	1024x768	640x480

  - Capacity (23MB)

	6M	5M	4M	3M	2M	1M	VGA
Superfine	7	8	11	14	23	52	111
Fine	12	15	19	24	36	72	133
Normal	21	24	32	39	50	85	138

  ※ These figures are measured under Samsung's standard conditions and may vary depending on shooting conditions and camera settings.

- Image Play
  - Type : Single image, Thumbnails, Slide show, Movie Clip
  - Editing : Trimming, Rotating, Resizing
- Interface : Digital output connector : USB 2.0 (Mass Storage Class)
  Video Out : Pal & NTSC selectable
  Audio : Mono (without external codec)
  Pictbridge (Full Option)
- Power Source : Rechargeable battery : 3.7V Li-ion battery (SLB-0837)
  ※ Included battery may vary depending on sales region.
- Dimensions (WxHxD) : 96.9 X 56.8 X 20.5 mm
- Weight : 129.5g
  - Operating Temperature : 0 ~ 40°C   - Operating Humidity : 5 ~ 85%
- Software
  - Camera Driver : Storage Driver (Windows98 / 98SE / 2K / ME / XP, Mac OS 9.0 ~ 10.3)
  - Application : Digimax Master
- Special Features
  - 3X Optical Zoom for Still & Movie.
    MPEG-4 VGA 30 fps Movie Clip (supporting Edit on DSC), Effect Key
    Powerful Effect (Colour, Highlight, Composite, Photo Frame)
    Easy Mode Change using "M" button

※ Specifications are subject to change without prior notice.
※ All trademarks are the property of their respective owners.

Software Notes

Please ensure that you read the instruction manual carefully before use.

- The attached software is a camera driver and image editing software tool for Windows.
- Under no circumstances should all or part of either the software or the user manual be reproduced.
- Copyrights for software are licensed only for use with a camera.
- In the unlikely event of a manufacturing fault, we will repair or exchange your camera.
  We cannot, however, be held responsible in any way for damage caused by inappropriate use.
- Using a Hand-made PC or a PC and OS that has not been guaranteed by the manufacturer is not covered by the Samsung warranty.
- Before reading this manual, you should have a basic knowledge of computers and O/S (Operating Systems).

System Requirements

For Windows	For Macintosh
PC with processor better than Pentium II 450MHz (Pentium 700MHz recommended)	Power Mac G3 or later
Windows 98 / 98SE / 2000 / ME / XP	Mac OS 9.0 ~ 10.3
Minimum 64MB RAM	Minimum 64MB RAM
200MB of available hard disk space	110MB of available hard-disk space
USB port	USB port
CD-ROM drive	CD-ROM drive
1024x768 pixels, 16bit colour display compatible monitor (24bit colour display recommended)	QuickTime player or a media player that supports AVI file format. DivX (For movie clip)

About the software

After inserting the CD-ROM provided with this camera into the CD-ROM drive, the following window should automatically run.

Before connecting the camera to the PC, you should first install the camera driver.

■ **Camera driver : This enables images to transfer between the camera and PC.**

This camera uses the USB Storage Driver as the camera driver. You can use the camera as a USB card reader. After installing the driver and connecting this camera to the PC, you can find [Removable Disk] in [Windows Explorer] or [My Computer]. A USB Storage Driver is provided only for Windows. A USB Driver for MAC is not included with the Application CD. You can use the camera with Mac OS 9.0 ~ 10.3.

■ **Digimax Master : This is the all-in-one multi media software solution.**
You can download, view, edit and save your digital images and movie clips clip with this software. This software is only compatible with Windows.

INFORMATION

- Be sure to check the system requirements before installing the driver.
- You should allow 5 ~ 10 seconds for running the automatic setup program according to the capability of your computer. If the frame does not show, run the [Windows Explorer] and select [Samsung.exe] in the CD-ROM Drive root directory.

Setting up the application software

- To use this camera with a PC, install the application software first.
  After this has been done, the stored images in the camera can be moved to the
  PC and can be edited by an image editing program.

- You can visit the Samsung web-site through the internet.

  http://www.samsungcamera.com : English
  http://www.samsungcamera.co.kr : Korean

1. The auto run frame will display. Click the
   [Install] menu in the Auto run frame.

2. Install the camera driver, DirectX, Xvid and Digimax Master by selecting a
   button shown on the monitor. If an upper version of DirectX was installed on
   your computer, DirectX may not be installed.
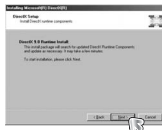
※ The XviD codec is distributed according to and under the terms and conditions of
the GNU General Public License and everyone can copy, modifiy and distribute
this codec freely, but WITHOUT ANY WARRANTY, IMPLIED OR
EXPRESSED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR
PURPOSE; provided, however, that you have to follow the GNU General Public
License whenever you are distributing this codec or modification thereof.
For more information see the GNU General Publice License documents
(http://www.gnu.org/copyleft/gpl.html).

Setting up the application software

3. After restarting the computer, connect the PC to the camera with the USB cable.

4. Turn the camera power on.
   The [Found New Hardware Wizard] will open and the computer will recognise the camera.

※ If your OS is Windows XP, an image viewer program will open.
   If the download window of Digmax Master opens after starting Digimax Master, the camera driver was set up successfully.
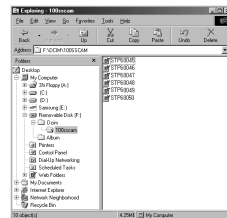
INFORMATION

● If you have installed the camera driver, the [Found New Hardware Wizard] may not open.
● On a Windows 98 or 98 SE system, the Found New Hardware Wizard dialog box opens and a window asking you to select a driver file may appear. In this case, specify "USB Driver" in the CD supplied. (for Windows 98 and 98 SE).
● PDF documents of user manual are included in the Software CD-ROM supplied with this camera. Search the PDF files with Window's explorer. Before opening the PDF files, you must install the Adobe Reader included in the Software CD-ROM.
● To install the Adobe Reader 6.0.1 correctly, Internet Explorer 5.01 or later had to be installed. Visit "www.microsoft.com" and upgrade the Internet Explorer.

Starting PC mode

• If you connect the USB cable to a USB port on your PC and then turn on the power, the camera will automatically switch to "computer connection mode".
• In this mode, you can download stored images to your PC through the USB cable.
• The LCD monitor is always turned off in PC mode.

■ Connecting the camera to a PC
  1. In any mode with the exception of Voice Recording mode, press the Menu button.
  2. Press the LEFT / RIGHT button and select the [SETUP] menu tab.
  3. Select the [USB] menu by pressing the UP / DOWN button and press the RIGHT button.
  4. Use the UP and DOWN buttons to select [Computer], and then press the OK button.
  5. Press the menu button twice and the menu will disappear.
  6. Connect the PC to the camera with the USB cable.

SETUP	
AF Lamp	
Sound	Computer
USB	Printer
LCD	
Video Out	
Back: ◄	Set:OK

■ Connecting the camera to a PC
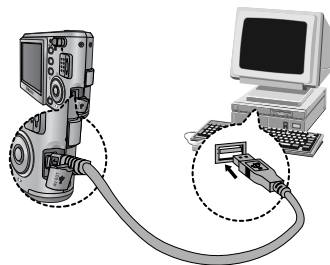
※ If you selected [Printer] in Step 4, when you connect the camera to your printer, the [Connecting Printer] message will display and the connection will not be established.
In this case, disconnect the USB cable, and then follow the procedure from Step 2 and onward.

■ Disconnecting the camera and PC : Refer to page 68
(Removing the removable disk).

INFORMATION

● To save battery power, it is recommended that you use the cradle (optional) when connecting the camera to a computer.

Starting PC mode

■ Downloading stored images
You can download the still images stored on the camera to your PC's hard disk
and print them or use a photo editing software to edit them.

1. Connect the camera to your PC with the USB cable.

2. On your computer's desktop display, select
[My Computer] and double click [Removable
Disk → DCIM → 100SSCAM].
The image files will then be displayed.
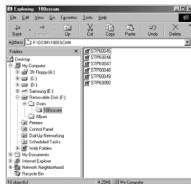
3. Select an image and press the right
mouse button.

4. A pop-up menu will open.
Click the [Cut] or [Copy] menu.
- [Cut] : cuts a selected file.
- [Copy] : copies files.

5. Click a folder where you want to paste the file.

6. Press the right mouse button and a pop-up
menu will open. Click [Paste].

7. An image file is transferred from the camera to
your PC.

- By using [Digimax Master], you can see the stored images in the memory
directly on the PC monitor and you can copy or move the image files.

CAUTION

● We recommend that you should copy the images to the PC to view them.
Opening images directly from the removable disk may be subject to
unexpected disconnection.
● When you upload a file that is not taken by this camera to the Removable
Disk, the [File Error!] message will be displayed on the LCD monitor in the
PLAY mode, and nothing is displayed in THUMBNAIL mode.

Removing the removable disk

■ Windows 98 / 98SE
  1. Check whether the camera and PC are transferring a file.
     If the camera status lamp blinks, please wait until the lamp has finished
     blinking and is constantly on.
  2. Unplug the USB cable.

■ Windows 2000 / ME / XP
  (The illustrations may differ from those shown depending on the Windows O/S.)
  1. Check whether the camera and PC are transferring a file.
     If the camera status lamp blinks, please wait until the lamp has finished
     blinking and is constantly on.

  2. Double-click the [Unplug or Eject Hardware] icon
     on the task bar.

     《 🖫 🕙 ☺ 3:18 AM
     [Double-click!]

  3. The [Unplug or Eject Hardware] window will
     open. Select the [USB Mass Storage Device]
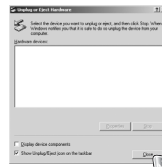   and click the [Stop] button.

  4. The [Stop a Hardware device] window will open.
     Select the [USB Mass Storage Device] and click
     the [OK] button.

  5. A [Safe to Remove Hardware] window will
     open. Click the [OK] button.

  6. A [Unplug or Eject Hardware] window will open.
     Click the [Close] button and the removable disk
     will be removed safely.

  7. Unplug the USB cable.

Setting up the USB Driver for MAC

1. A USB Driver for MAC is not included with the software CD as MAC OS
   supports the camera driver.
2. Check the MAC OS version during start-up.
   This camera is compatible with MAC OS 9.0 ~ 10.3.
3. Connect the camera to the Macintosh and turn the camera power on.
4. A new icon will be displayed on the desktop after connecting the camera to
   the MAC.

Using the USB Driver for MAC

1. Double click a new icon on the desktop and the folder in the memory will be
   displayed.
2. Select an image file and copy or move it to MAC.

CAUTION

● For Mac OS 10.0 or later : First complete uploading from computer to
                             camera and then remove the removable disk
                             with the Extract command.
● If a movie clip can't play back on the Mac OS, please visit the following site
  (http://www.divx.com/divx/mac/) and download the codec. Or, use a media player
  that supports the Xvid codec (Mplayer, VLC(VideoLAN Client) media player).

Removing the USB Driver for Windows 98SE

■ To remove the USB driver, refer to the process shown below.

1. Connect the camera to your PC and turn it on.
2. Check whether the Removable Disk is on the [My Computer].
3. Remove the [Samsung Digital Camera] on the Device manager.

4. Disconnect the USB cable.
5. Remove the [Digimax L60 / Kenox X60] on the Add / Remove Programs Properties.
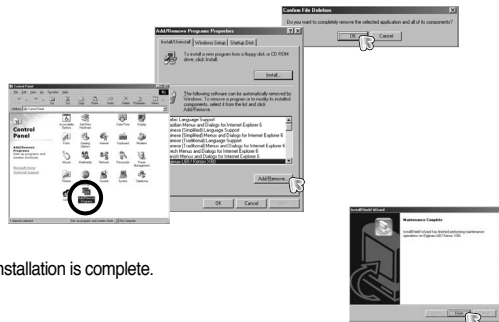
6. Uninstallation is complete.

Digimax Master

■ You can download, view, edit and save your images and movies with this software. This software is only compatible with Windows except for the Windows 98.

■ To start the program, click [Start → Programs → Samsung → Digimax Master].
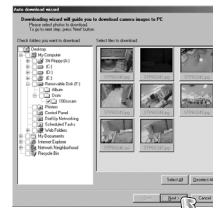
● Downloading images
   1. Connect the camera to your PC.

   2. A window for downloading images will display after connecting the camera to your PC.
      - To download the captured images, select the [Select All] button.
      - Select desired folder in the window and click the [Select All] button. You can save captured images and selected folder.
      - If you click the [Cancel] button, downloading will be cancelled.
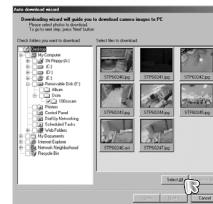
   3. Click [Next >] button.

Digimax Master

4. Select a destination and make a folder to save downloaded images and folders.
   - Folder names can be made in order of date and images will be downloaded.
   - Folder name will be made as you want and images will be downloaded.
   - After selecting a folder that was made before, images will be downloaded.
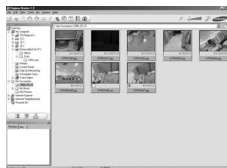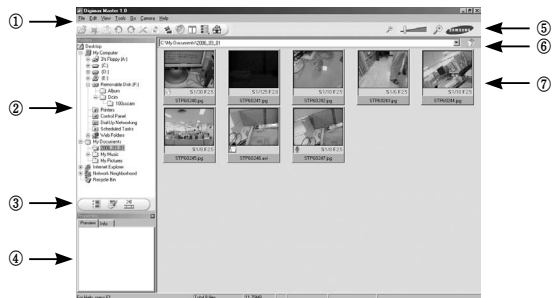
5. Click [Next >] button.

6. A window will open as shown alongside. The destination of the selected folder will be displayed on the upper side of the window. Click the [Start] button to download the images.
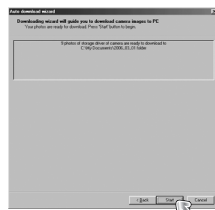
7. Downloaded images will be displayed.

● Image viewer : You can view the stored images.

- Image viewer functions are listed below.
  ① Menu bar : You can select menus.
    File, Edit, View, Tools, Change functions, Auto download, help, etc.
  ② Image selection window : You can select the desired images in this window.
  ③ Media type selection menu : You can select image viewer, image edit and movie edit functions in this menu.
  ④ Preview window : You can preview an image or a movie clip and check the multi media information.
  ⑤ Zoom bar : You can change preview size.
  ⑥ Folder display window : You can see the folder location of the selected image.
  ⑦ Image display window : Images of the selected folder are displayed.

※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Master

● Image edit : You can edit the still image.
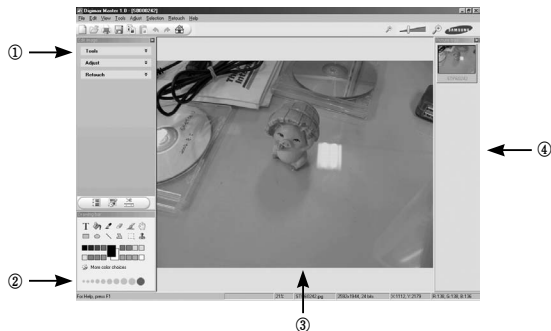
- Image edit functions are listed below.
  ① Edit menu : You can select the following menus.
     [Tools] : You can resize or crop the selected image. See the [Help] menu.
     [Adjust] : You can modify image quality. See the [Help] menu.
     [Retouch] : You can change image or insert effects on the image. See the [Help] menu.
  ② Drawing tools : Tools for editing an image.
  ③ Image display window : A selected image displays in this window.
  ④ Preview window : You can preview the changed image.

※ A still image edited with Digimax Master can't be played back on the camera.
※ Refer to the [Help] menu in Digimax Master for further information.

● Movie edit : You can get the still image, movie clip, narration, music files together in a movie clip.
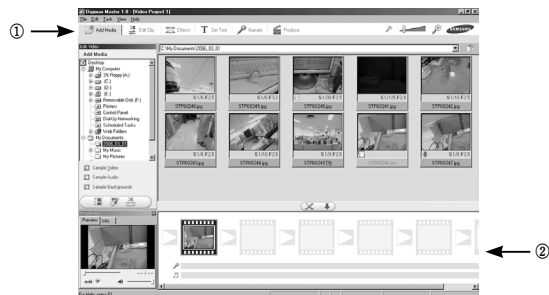
- Movie clip edit functions are listed below.
  ① Edit menu : You can select the following menus.
     [Add Media] : You can add other media elements to a movie.
     [Edit Clip] : You can change the brightness, contrast, colour and saturation.
     [Effects] : You can insert an effect.
     [Set Text] : You can insert texts.
     [Narrate] : You can insert a narration.
     [Produce] : You can save the edited multi media as a new file name.
               You can select AVI, Windows media (wmv), Windows media (asf) and movie clip for this camera (avi, MPEG-4) file types.
  ② Frame display window : You can insert multi media in this window.

※ Some movie clips that were compressed with a codec that is not compatible with the Digimax Master can't play back in the Digimax Master.
※ Refer to the [Help] menu in Digimax Master for further information.

FAQ

■ Movies for viewing on the camera : You can play back a movie on this camera

1. Select a movie for playing back on the camera by pressing the [Add] button.
   Insert effects and edit the movie. To save the edited movie, press the [Make] button.
2. Select [Movie for camera] video type.

3. Select Camera option, Output location, File name and press the [Make] button.
   - Frame size : Selecting the width and height of the frame.
   - Frame rate : Selecting the frame rate per second.
   - File location : Selecting a location where the edited movie is saved.
   - File name : To play back the movie on the camera, you must keep the DCF
     rule. Save the movie as STP6XXXX.avi (You can input any
     numbers between 0001 ~ 9999
     instead of XXXX letters).
4. Connect the camera to the computer with the
   included USB cable.
5. Copy the edited movie to [Removable
   Disk\DCIM\XXXSSCAM].
   (You can input any numbers between 100 ~ 999
   instead of XXX letters)
6. You can play back the movie in the Play mode of
   the camera.
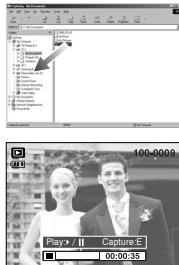
■ Please check the following if the USB connection malfunctions.

Case 1 USB cable is not connected or it is not the supplied USB cable.
→ Connect the supplied USB cable.

Case 2 The camera is not recognised by your PC.
   Sometimes, the camera may appear under [Unknown Devices] in
   Device Manager.
→ Install the camera driver correctly.
   Turn off the camera, remove the USB cable, plug in the USB cable
   again, and then turn on the camera.

Case 3 There is an unexpected error during file transfer.
→ Turn the camera power off and on again. Transfer the file again.

Case 4 When using the USB hub.
→ There may be a problem in connecting the camera to the PC through
   the USB hub if the PC and the hub are not compatible. Wherever
   possible, connect the camera to the PC directly.

Case 5 Are other USB cables connected to the PC?
→ The camera may malfunction when it is connected to the PC at the
   same time as another USB cable. In this case, disconnect the other
   USB cable, and connect only one USB cable to the camera.

FAQ

Case 6   When I open the Device Manager (by clicking Start → (Settings) →
          Control Panel → (Performance and Maintenance) → System →
          (Hardware) → Device Manager), there are Unknown Devices or Other
          Devices entries with a yellow question mark(?) beside them or devices
          with an exclamation mark(!) beside them.
    → Right-click on the entry with the question (?) or exclamation (!) mark
      and select "Remove". Restart the PC and connect the camera again.
      For Windows 98 PC, remove the camera driver also, restart the PC,
      and then reinstall the camera driver.

Case 7   In some security programs (Norton Anti Virus, V3, etc.), the computer
          may not recognise the camera as a removable disk.
    → Stop the security programs and connect the camera to the computer.
      Refer to the security program instructions about how to temporarily
      disable the program.

Case 8   The camera is connected to the USB port located on the front of the
          computer.
    → When the camera is connected to the USB port located on the front of
      the computer, the computer may not recognise the camera. Connect
      the camera to the USB port located on the back of the computer.

■ When the movie clip doesn't play back on the PC

    ※ When the movie clip recorded by the camera doesn't play back on the PC,
      the causes are mostly due to the codec installed on the PC.

● When codec for play back the movie clip isn't installed
    → Install the codec as listed below.

    [Installing codec for Windows]
        1) Insert the CD provided with the camera.
        2) Run the windows explorer and select [CD-ROM drive:\XviD] folder and
           click the XviD-1.0.3-20122004.exe file.
    ※ The XviD codec is distributed according to the GNU General Public Licence
      and everyone can copy, distribute and change this codec. This Licence
      applies to any program or other work which contains a notice placed by the
      copyright holder saying it may be distributed under the terms of this General
      Public Licence.
      For more information, see the Licence documents
      (http://www.gnu.org/copyleft/gpl.html).

    [Installing codec for Mac OS]
        1) Visit the following site for downloading the codec.
           (http://www.divx.com/divx/mac)
        2) Click the [Free Download] button located at the upper right side of the page
           and a window for downloading the DivX codec will display.
        3) Select Mac OS you use and click the [Download] button. Save it on a folder
           you want to.
        4) Run the downloaded file and the codec for playing back the movie clip will
           be installed.
    ※ If a movie clip can't play back on the Mac OS, use a media player that
      supports XviD codec (Mplayer, VideoLanClient).

FAQ

● When the DirectX 9.0 or later is not installed
  → Install the DirectX 9.0 or later
  1) Insert the CD provided with the camera
  2) Run the windows explorer and select the [CD-ROM drive:\ USB Driver\DirectX 9.0] folder and click the DXESETUP.exe file.
    The DirectX will be installed. Visit the following site for downloading the DirectX.http://www.microsoft.com/directx

● If a PC (Windows 98) stops responding while the camera and PC are connected repeatedly
  → If a PC (Windows 98) is turned on for a long time and the camera is connected repeatedly, the PC may not recognise the camera. In this case, re-start the PC.

● If a PC connected with the camera stops responding while Windows is starting.
  → In this case, disconnect the PC and the camera and Windows will start. If the problem happens continuously, set the Legacy USB Support to disable and re-start the PC. The Legacy USB Support is in the BIOS setup menu. (The BIOS setup menu differs from the PC manufacturers and some BIOS menus don't have Legacy USB Support) If you can't change the menu by yourself, contact to the PC manufacturer or BIOS manufacturer.

● If the movie clip can't be deleted, removable disk can't be extracted or an error message displays during the file transfer.
  → If you install only the Digimax Master, the problems mentioned above occasionally happen.
    - Close the Digimax Master program by clicking the Digimax Master icon on the Taskbar.
    - Install all the application programs included in the software CD. (You must install the Movie clip codec)

MEMO

MEMO

MEMO

MEMO

MEMO

SAMSUNG

Internet address - http : //www.samsungcamera.com

CE   The CE Mark is a Directive conformity
      mark of the European Community (EC)

6806-3328